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Hearings. v. 42-45, 1958.

1958

Mr Borden

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

CALGARY,

ALTA.

VOLUME No.: 42

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CORRIGENDUM

In Volume 35

Page 4881	delete lines 14, 15, 16 and part of 17, substitute: "I would like to make an opening comment on this description I will undertake to give on the proration mechanism. It is an over-simplification of what really takes place."
	line 23, delete "granted" substitute "times"
Page 4896	line 11, delete "so-called" substitute "prorated"
Page 4897	line 10, after "situation" insert "and" line 11, delete "and"
Page 4900	line 8, delete "in the eastern states", substitute "such as The Eastern States Company"
	line 18, delete "exploration" substitute "production"
Page 4902	line 21, delete "17%" substitute "70%"
Page 4917	line 24, delete "Mr. Frawley" substitute "Mr. White"
Page 4924	line 25, delete "Guanipa" substitute "Guico"
	delete "certain" substitute "unaffiliated"
Page 4941	line 18, after "factors" insert "including"
Page 4943	line 19, delete "we" substitute "one company"
Page 4948	line 8, delete "$2.05" substitute "2 to 5"
Page 4952	line 17, delete "out" substitute "pipe"
	lines 23 and 24, delete "35%" and "21%" substitute "35°" and "31°"

Page 4953 line 7, delete "pipes"
substitute "types"

line 23, delete "just"
substitute "thus"

Page 4956 line 19, delete "worthwhile"
substitute "reasonable"

line 24, delete "3¢"
substitute "8¢"

Page 4959 line 6, delete "produced"
substitute "purchased"

Page 4963 last line, delete "ballot"
substitute "balance"

Page 4976 line 9, delete "31"
substitute "81"

Page 4977 line 15, delete "projection"
substitute "a refinery projected"

Page 4981 lines 20 & 21, delete "in ground"
substitute "and crown"

Page 4988 line 13, after "sales"
insert period

line 14, after "basin"
insert comma

Page 4992 line 25, delete "dries"
substitute "drives"

Page 5006 line 12, delete "it"
line 15, at end of line add "to"

Page 5008 line 1, delete "exports"
substitute "imports"

Page 5015 line 7, delete "integrate"
substitute "regulate"

line 11, delete "tie in"
substitute "tie them in with"

Page 5017 line 15, delete "with 50%"
substitute "for 50¢"

In Volume 39

Page 5526	the names "El Secunda" and "San Joachim" should read "El Segundo" and "San Joaquim"
Page 5534	line 19, delete "21,6000" substitute "21,600" line 22, delete "a" line 23 delete "1,000" substitute "10,000"
Page 5538	line 23, delete "3¢" substitute "3%"
Page 5540	line 15, delete "2¢" substitute "2/7ths" line 17, delete "non"
Page 5551	line 23, delete "in volume" substitute "on water"
Page 5555	lines 2 and 13 delete "trans-middle" substitute "transmittal

ROYAL COMMISSION

ON

ENERGY

Hearings held at Calgary,
commencing Tuesday, April
29, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C. -- Chairman

Mr. J.L. Levesque -- Member

Mr. G.E. Britnell -- Member

Dr. R.D. Howland -- Member

Mr. L.J. Ladner, Q.C. -- Member

Dr. R.M. Hardy -- Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson -- Secretary to the Commission.

Major N. Lafrance -- Assistant Secretary to the Commission.

APPEARANCES: Page

WEST MAYGILL GAS AND OIL LIMITED 5837

Mr. J. M. Pierce - President

TEXACO EXPLORATION COMPANY 5861

Mr.S.A.Berthiaume - Vice-President and Manager
Mr.T.W.C.Thomson - Vice-President
Mr.R.F.A.Logan - Crude Oil Purchases and Sales
Mr.W.A.Scotland - Petroleum Engineer

THE BAYLEY SELBURNE GROUP 5881

Mr.J.P.Gallagher) - Dome Exploration
Mr.T.S.M.Gard) Company
Mr. E. Galvin - Medallion Petroleum Company
Mr.N.W.Nichols - Great Plains Development Co. of Canada, Limited
Mr. A.E.Feldmeyer - Canadian Superior Oil of California Ltd
Mr. W.A.Friley - Bayley Selburne Oil & Gas Limited
Mr.W.E.Powell - Canadian Husky Oil Limited
Mr.V.Vansant,Jr. - Amurex Oil Company
Mr.A.F.Beck) - Canadian Export Gas Ltd
Mr.Hahog) Banff Oil Limited

MOBIL OIL OF CANADA LIMITED 5937

Mr.A.O.Detmar - President and General Manager

EXHIBITS:		Page
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CC-15-2	Brief of Texaco Exploration Company	5861
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Thursday,
May 15, 1958

---On resuming at 10.00 a.m.

---Mr. Commissioner Levesque was not present.

---Mr. Commissioner Ladner was not present.

Submission of

WEST MAYGILL GAS AND OIL LIMITED

APPEARANCE:

Mr. J.M. Pierce - President

MR. PATTILLO: Mr. Chairman, Mr. Pierce has submitted a letter of date February 10th and has supplemented that letter by a letter dated May 9th, 1958. I would suggest that they be fastened together and that they be marked, as one exhibit, CC-15-1.

Mr. Pierce, would you please read both the letters?

---EXHIBIT NO. CC-15-1: Letters dated February 10, and May 9, 1958.

MR. PIERCE: Mr. Chairman and members of the Commission, on behalf of West Maygill Gas and Oil Limited, I wish to place on record some facts relevant to the exploration for oil and gas and the marketing thereof in Canada.

It is possible to divide Canadian independent producers into two categories:

1. Pure exploration companies who have discovered their oil and gas reserves by astute geology and follow-up engineering and luck in varying combinations of these factors; and

2. Retail purchasers -- companies that have purchased the majority of their reserves, mainly oil, at Crown lease sales in the Provinces of Alberta and Saskatchewan.

The oil industry is by nature a high risk business there being no such thing as a proven lease until it is actually drilled and placed on production and we believe that several of these purchasing groups have not placed a sufficient risk factor into these purchases. Furthermore, the marketing of oil itself is a high risk business and the history of the industry throughout the world has shown that oil marketing fluctuates from time to time.

We recognize that Canada's production has now grown to the stage where we are competitive on the world's oil markets and are in reality in no different position from the oil producers in Kansas, Wyoming and Texas. It is unfortunate that Canada's growth to oil producing maturity has coincided in time with a depressed period in world oil marketing, but this is a fact that we must face.

The companies that have secured their

reserves by discovery or careful retail buying will have taken sufficient risk factor into account to where they will not be seriously hurt by reduced market volumes and we do not think that it is fair and equitable to ask these producers to, in effect, subsidize the retail purchasers by forcing Western oil into uneconomic markets. We are afraid that the estimate of a price reduction at the wellhead of 10 cents per barrel for Alberta crude to be competitive in Montreal would in reality become more like 50 cents, or even more, by the time Alberta crude got into active competition in the Montreal area.

We think that a complete free energy approach to the hydro carbon energy industry is fundamental. If this was done at the present time the rapid increase in income from the new gas markets would offset the moderate decline in oil income being suffered by some segments of the industry, and, therefore, the net total would tend to balance out.

We believe it most important that in a high risk, high odds resource industry like oil, government should exercise a minimum of interference because by their very nature the two types of administration are incompatible.

On the subject of gas export we would like to make the point that we consider there is great urgency in the approval of gas export from

Canada to the United States. These markets will not wait for us. Gas transmission and distribution is, by nature, a monopoly business. Once a pipeline and distribution system are into an area the history of the business has shown that very rarely is a secondary distribution system ever built. Therefore, the first supplier in has the market, it is that simple. At the present time the Canadian industry can secure certain American markets, not because the Americans are short of gas, but by simple economics of the fact that we can lay down gas in these areas at a lower price than can American suppliers. It is essential that we get our supply lines in as soon as possible and secure these markets.

The date of that original submission was February 10, and after some discussions on these matters with Mr. Pattillo, we submitted an amending letter dated May 9, which is almost three months later.

In regard to our appearance before the Royal Commission on Energy on Wednesday, May 14th, we have developed some interesting information in this office which I hesitate to proffer in a formal brief, but which I would not at all mind being brought out in cross-examination.

We are one of the few Canadian oil companies that has an active US subsidiary, Ranger

Oil Company, which produces about 8,000 barrels per month in Kansas. In analysing last year's operations we find our lifting costs, or the cost of producing oil, to be as follows:

Canada - - - - - -	Lifting costs per barrel	-- 58¢
	Percentage of gross income after Royalty	-- 21%
United States- - -	Lifting costs per barrel	-- 33¢
	Percentage of gross income after Royalty	-- 8%

MR. PATTERSON: Mr. Pierce, I wonder if you would be good enough to amplify for us the extent to which you can actually classify independent producers in the two categories that you mention. Are there firms which purely and simply fall into a class of being retail purchasers, and if so, what are those particular firms?

MR. PIERCE: Well, I think I would rather answer that question, Mr. Patterson, by giving an example of the firms rather than giving you a list of each of them, because that could be slightly embarrassing to our competitive relationship with those firms.

I would say that a company like Canadian Oil Companies, who are well-known operators under White Rose, are a fitting example of a company who are 80% Canadian operators. Their whole modus operandi has been to try and discover something which -- I would think it would be to discover

what percentage of management time is put towards exploration rather than studying the absolutely proven ground. On the other side, I would say a retail purchaser would be a company more like Whitehall Petroleums, for example, that have developed possibly 80% or 90% of their funds which have gone into the purchase of absolutely proven oil. There is a substantial group in the retail purchase group.

MR. PATTERSON: Is what you are suggesting this, then, that those companies falling into the retail purchase group have bought oil in the ground by a fairly detailed dollar estimate, and in making those dollar estimates paid rather too much for the oil in the light of world market conditions and in the extent that those companies have bailed out of that situation, you think it is unfair.

MR. PIERCE: That is correct.

MR. PATTERSON: Now, turning to your letter of May 9th in order to make that comparison of lifting costs of assistance to us, do you suggest that field conditions of your operation are sufficiently comparable in the two places that one can draw very much fromthat comparison?

MR. PIERCE: Yes. From the original development of this evidence in discussion I studied our records at great length, and to make

sure that ours wasn't the unique situation, which I didn't think it was, I contacted the production superintendents of a couple of friendly, much larger oil companies, and I found that their experience has been the same, and I am quite sure if you question them you will find quite similar percentages developed between large United States operations and comparable Canadian operations.

I should mention, too, during this period, our average allowable was between 45 and 50 barrels per day during this period, and the average allowable for the United States production during the same period was 25 barrels a day. So there is a sharp discrepancy despite the fact that the Canadian operator was working on twice the allowable.

MR. PATTERSON: You are not, though, in a position to compare your finding, overall finding cost, that exploration and development cost which, together with lifting cost, would have to be considered in the overall picture.

MR. PIERCE: We have had that excellent information in recent months on finding cost. In the United States last year it was $1.75 a barrel; that was the Williston Basin. The United States average was $1.55, and we are finding oil here in Canada under $1.75. But we are discussing our general argument; the basis of discussion is the survival of the independent companies on the basis

of reducing markets, and we are not discussing the cost of finding so much as we are discussing the cost of operating.

MR. PATTERSON: Further to that letter, you express lifting cost per barrel as a percentage of gross income after royalty. Can you explain what that means?

MR. PIERCE: I think it is the most valid barometer to apply to lifting costs. Let's assume we are discussing a field like Pembina and the selling price of the oil is, let us say, \$2.50 or \$2.55 a barrel. We have a royalty to the Crown at that particular production of this allowable of, say, 10 per cent. So what we first do is pay the royalty, which would amount to 10 per cent of \$2.50, which gives \$2.25, and then apply the 58¢ against the \$2.25 to give the percentage. You have got to watch against keeping our denominators common, because if a company were operating in an area with high overriding royalties -- we have no overriding royalties amounting to more than 1 per cent. So the base is valid.

MR. PATTERSON: Have you from your examination of your operations an explanation for the difference between lifting costs of 58¢ and the lifting cost of 33¢? What are the elements which make one higher than the other?

MR. PIERCE: In our study of it -- and

this is backed up by discussion -- with one of the large oil companies having the same experience, the largest single factor has been reworks, the cost of reworking in Canada as compared with the States. For example, a typical drilling of 1,500 feet cost something like $1,800, $1,900; our average in Canada has been $500 to $800 for the same depth. However, the big discrepancy is not so much the cost per hour, it is the inefficient operation of the people running them where it takes two or three or four times as long to do a comparable job of servicing and setting up a well in Canada as it does in a mature well in Kansas.

MR. PATTERSON: What you are saying is that the skill of the personnel between the two countries varies, and we are still young and new at servicing and it takes a little longer, so that it costs a little more. Is that the main area for the variance between the two?

MR. PIERCE: That is the main area, but again we have got to look a little deeper. We have got right now in the servicing business to where roughnecks and drillers could easily work faster and be as conscientious and treat these jobs to the extent that their American counterparts have. So a lack of efficiency has been due -- let's be generous -- 50% due to lack of experience and 50% due to lack of effort.

MR. PATTERSON: Thank you.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: Will you give me just a thumbnail sketch of your company, West Maygill?

MR. PIERCE: Yes.

MR. FRAWLEY: Where is it incorporated?

MR. PEIRCE: The company is an Ontario corporation. We are registered to do business in Ontario, Saskatchewan and Alberta. We were the original discovery group of Steveville which discovered the Steveville-Cessford gas field which we leased some ten years ago. Our main area of reserves in Canada is Steveville-Cessford, and the deep zone under Viking-Kinsella is under contract to Northwestern Utilities, Limited.

MR. FRAWLEY: Are you primarily gas or primarily oil?

MR. PIERCE: Bringing reserves to a hydrocarbon base, we have set our reserves at 75% gas and 25% oil.

MR. FRAWLEY: You say you were incorporated originally in Ontario. It was organized in Ontario, was it?

MR. PIERCE: Well, the lawyer for the company at that time was resident in Ontario. He incorporated it there. I think it was an error. We consider Alberta our home base of operations.

MR. FRAWLEY: The only claim to Ontario is the fact that the incorporating solicitor lived in Toronto?

MR. PIERCE: That was apparently the case.

THE CHAIRMAN: I do not think the witness said Toronto to start with. You are putting words in his mouth.

MR. PIERCE: Ontario is known for the ability of its incorporation laws.

MR. FRAWLEY: I thought you were going to say Ontario was known for Toronto. In other words, it is a Canadian company in every sense of the word?

MR. PIERCE: Yes.

MR. FRAWLEY: No American money in it at all?

MR. PIERCE: I wouldn't say that. Our transfer sheet on the stock every month shows a continuous movement of the capital stock for public issue stock from Canadian owners to American, and some English owners. It has been a strong trend that way over the last two years.

MR. FRAWLEY: Now, I wish to say I was intrigued with this classification of yours. I must say, Mr. Pierce, I never saw it written down quite like that before. You think that these basic, you might call them that, you divide them up as it were into basic producers and purchasers; would that be a fair way of putting it?

MR. PIERCE: I think so.

MR. FRAWLEY: Then you go on a little

further and talk about - you put the dicoverer and producer in and then you put careful retail buyers in and then you put another classification in, the retail purchasers. I must confess that is where I get pretty confused.

MR. PIERCE: The retail purchasers, Mr. Frawley, is classification two, and I mention a careful retail buyer, I merely put the careful retail buyer into the same sort of subsidiary classification under one --

MR. FRAWLEY: I know it is sort of a sub paragraph (a) of paragraph 1.

MR. PIERCE: Yes.

MR. FRAWLEY: I think you are to be complimented on your ingenuity. I would just like to find out how substantial it is, if you don't mind, Mr. Pierce. There were a lot of people on the cover of Mr. R. A. Brown's brief. Some of them were discoverers, weren't they? Discovering companies?

MR. PIERCE: I can only think of one. Home Oil is a substantial discovery company. Highly respected as such.

MR. FRAWLEY: And the rest of them would be retail buyers?

MR. PIERCE: Well, I wonder if I could look at the list?

MR. FRAWLEY: Oh yes, you certainly can. I don't have a copy of it with me. I am afraid

I cannot produce it. Here we are. Canadian Devonian, C-nadian Home State, Can-Tex Exploration, Colorado Oil, Consolidated East Crest. How would you classify them?

MR. PIERCE: Well, when Mr. Patterson asked me the same question, I didn't think it would be quite fair to give a classification for each of them, and I really don't think it is quite fair.

MR. FRAWLEY: Oh, I see, you mean it is sort of classified information, is it?

MR. PIERCE: I don't think it is fair to divide them all. I would say that even of those companies -- Now there are a few of them, as I said in answer to Mr. Patterson, who are pure purchase companies. There are a few of those who are also exploration companies and the balance with substantial reserves, but I know the Home people so well I don't think they would mind me using them as an example.

MR. FRAWLEY: You put them on both sides?

MR. PIERCE: Home Oil is primarily exploration with some substantial retail purchases. I put them in this case on both sides of the fence. Canadian Devonian, of course, their great discovery was made on the farm, so they should be considered as a discovering company and they are very interested in moving their crude.

MR. FRAWLEY: But your conclusion is that one group, the retail purchase group, want

to be bailed out?

MR. PIERCE: I think there is a substantial differentiation on the average can be made and I think we can see that the group of companies has purchased more oil than they have discovered.

MR. FRAWLEY: I have been sitting here since the 29th of April, and other than your own company, I have not heard anybody protest against, let us come out and say it, the Montreal market, except the major oil companies. Have you heard it any differently than that?

MR. PIERCE: Yes, I have.

MR. FRAWLEY: In this record, I mean?

MR. PIERCE: No, I think that certain members of the group, of the Home group that supported -- underwrote the basic Levy report and paid for it, may not have been completely in accord with the Montreal pipeline proposal.

MR. FRAWLEY: I just have to go by the record. It is pretty difficult to do anything else. You say that our growth to oil producing maturity has coincided in time with a depressed period in world oil marketing. Now, Mr. Pierce, didn't it also coincide with something else: reluctance on the part of the major companies to disturb their foreign oil going into the Montreal market?

MR. PIERCE: No, I don't think that is quite true. I think if there is any reluctance on their part, it may follow on your world

over-supply.

MR. FRAWLEY: It is a non sequitor, you think?

MR. PIERCE: No, I don't agree with that. I think, Mr. Frawley, in the history of the American oil business, independent producers in the States have had a much larger boom in the last fifty years than we have had here. If one analyzes the Jersey group, for example, we see that all the money, as you know, the largest profits are made in Creole and Humble, so you say why on earth are they in the transportation, refining, marketing end of the business? They are in it for the simple reason they have to dispose of their crude because they are such large producers that they couldn't possibly rely on selling to a competitive company who does have transportation, marketing and refining facilities. The independent small oil companies, the independent oil companies as a group do not have those facilities and in plain English the independent companies all ride along on the coattails of the major companies and provide a very useful function for them in that they discover an inordinate amount of oil on the continent compared to our resources and as such, are very useful to them.

MR. FRAWLEY: Mr. Pierce, you talk about the Jersey Company and the fact that it has to be

in transportation, refining, and production. Are you not also overlooking this, that they are into production in all parts of the world so that hard times in Alberta will be more than offset by good times in Venezuela?

MR. PIERCE: Well they must develop a world-wide balance.

MR. FRAWLEY: All right. You speak of being afraid that a price reduction of 10¢ at the wellhead would be a bad thing. Would your fear disappear if you knew that it might not be done, if there were no wellhead reduction of price at all?

MR. PIERCE: No, because I think it could tie us to a fixed price, which, even though satisfactory today at this fixed price, it is generally lower than the United States. It is 30¢ lower, 25¢ lower than the Mid-continent United States price, and would put a ceiling on our price where we wouldn't be able to develop future increments as easily as if they were into competitive markets.

MR. FRAWLEY: Thank you very much.

MR. COMMISSIONER HARDY: I must confess, Mr. Pierce, that I share Mr. Frawley's confusion on some of these points. My understanding has been that a good number of the oil servicing companies operating in Canada are American firms,

and that perhaps the majority of the business was done through American firms; is that not right?

MR. PIERCE: I must explain something that I did not realize that you might not realize; by "servicing" I mean service rate companies. We find our largest cost was for the service rates, they are a smaller rate as compared to a rate used for drilling. The service rate is for pulling rods out of the well, after it is in production. They are generally Canadian owned. They are at least 89% Canadian owned.

MR. COMMISSIONER HARDY: Can't you go and simply look up the telephone directory and call a firm that is in the oil well servicing business and take any one of a number of standard, established American firms that are operating in this country and ask them to do that job?

MR. PIERCE: No. I think you are thinking of people like Dow Chemical and that group.

MR. COMMISSIONER HARDY: Don't they do that sort of thing?

MR. PIERCE: No, they provide engineering and technical services for well logging and perforating, and other types of things, and the cost is also higher than the States. They run on a catalogue price and they are also higher than the States. There is a great difference, we find,

in the actual service rates and in the time they spend on the wells. Of course, the companies which we discuss here in the United States servicing companies are not in connection with perforating and acidization companies. They are not that group.

MR. COMMISSIONER HARDY: There is another point, too, Mr. Pierce. I fail to see why this completely free energy approach that you are discussing on page 2, and your letter of February 10th, how it is possible on that basis to make a distinction between retail purchasers and what you call pure exploration companies. In the final analysis, if the free economical approach is operating properly, the answer will have to come out the same. That is, the so-called pure exploration companies -- some of them admitted that they were not only operating here, but that they were into all aspects of the business -- that under the present system that is operating in Alberta, they take the overall risk of wildcatting, and so on, and then when they make a discovery on the checkerboard plan, half of the area comes back to the government under the Crown lease plan. Is that not right?

MR. PIERCE: That is correct.

MR. COMMISSIONER HARDY: Well, the pure exploration companies surely have the same right to bid on that as anybody else, is that correct?

MR. PIERCE: That is correct.

MR. COMMISSIONER HARDY: They surely are not going to bid more than they can on their long-term average than their cost of bringing in oil under the operation of wildcatting is going to be, but they very correctly would bid the same amount?

MR.PIERCE: That doesn't work out that way in practice because they have expended such large amounts not only on that one project, as Imperial's brief pointed out so well, but they have to amortize that against the successful projects. There are many unsuccessful ones. They just can't afford to bid on those main lines merely to the extent that someone who sits idly by across the fence and who has no large scale exploration geologic and land department, but they are concomitant --

MR. COMMISSIONER HARDY: That is what I cannot understand, the economics of it. If they can afford to do wildcatting, I cannot see why, in the long term point of view, they cannot afford to bid on exactly the same price per barrel.

MR. PIERCE: They can't. They can't because their operation is predicated on low land cost and high geologic, geophysical and general administration costs that go with the vast geologic and geophysical expenses, and they do it right to a

per acre cost and finally to a per barrel cost.

MR. COMMISSIONER HARDY: You are saying then that this retail purchaser bids higher per barrel of oil than it is going to cost the pure exploration company?

MR. PIERCE: That is correct, because the pure exploration company had to take a long-term view. He cannot keep his economic thinking to that one-quarter section that is up for sale; he must tie it up to later activity and take into account substantial risk factors because it is possible he might go into five or ten of these and lose everything.

MR. COMMISSIONER HARDY: Over a long period you have given us exploration costs of $1.75 a barrel.

MR. PIERCE: Well, that is quite correct.

MR. COMMISSIONER HARDY: You are suggesting there a substantial difference in the cost per barrel to these retail purchasers between this and whatever they are paying.

MR. PIERCE: Quite correct. Now, what we think they have done, or what they have done, is pay what they consider a full present worth for that crude in the ground where they thought there was no risk whatever and we think they under-estimated one risk factor, namely the marketing of that crude and they find their pay-off is not sufficient to amortize the debt they incurred in order to secure money to buy. Therefore they must move all crude out and affect the future profits in order to service the present debt.

MR. COMMISSIONER HARDY: I cannot understand

why you object to that process under this free economy approach or free energy approach you are talking about.

MR. PIERCE: My paragraph on the free energy approach was on page 2, paragraph 2, that we consider that if there were a free energy approach we would then be able to export gas in substantial volume. The income from the gas would offset these mistakes, shall we put it, in pay-off economics that several of the companies have made, and the income would tend to balance out.

MR. COMMISSIONER HARDY: You are going to see that applied to gas but not oil exploration?

MR. PIERCE: No, I do not see why these people cannot buy these proven leases.

MR. COMMISSIONER HARDY: You are suggesting there is something wrong with this set-up, that these people are in the same position in marketing their oil as the so-called pure exploration?

MR. PIERCE: No, I am merely suggesting they should stay in the same position.

MR. COMMISSIONER HARDY: There has been no suggestion that they would be placed in any different position?

MR. PIERCE: Yes, there has been a question that the Government might be requested to develop some artificial method of putting

Alberta oil into the Montreal market, resulting in substantial wellhead price reduction.

MR. COMMISSIONER HARDY: These people you do not like here, their $1 a barrel profit is reduced?

MR. PIERCE: I do not see why the other groups should subsidize the people who come along after the discoveries have been made and purchase oil on a pay-off basis. I do not see why the discovery company should be penalized.

MR. COMMISSIONER HARDY: Thank you very much. I am still a bit confused about it.

THE CHAIRMAN: Thank you very much, indeed, Mr. Pierce, for the brief and the information which you have given the Commission.

SUBMISSION OF

TEXACO EXPLORATION COMPANY

Appearances:

Mr. S. A. Berthiaume	- Vice-President and Manager
Mr. T. W. C.Thomson	- Vice-President
Mr. R. F. A. Logan	- Crude Oil Purchases and Sales
Mr. W. A. Scotland	- Petroleum Engineer

MR. PATTILLO: The next submission which we propose to consider is that of the Texaco Exploration Company, which is a subsidiary of the Texas Company. A brief has been submitted to us which I propose, Mr. Chairman, be marked as CC-15-2, and I would ask the Texaco people to come forward.

---EXHIBIT NO. CC-15-2: Brief of Texaco Exploration Company.

MR. THOMSON: Mr. Chairman, I hope you will appreciate that this brief was prepared in haste on rather short notice and is therefore not presented in quite the form we would have liked to do it if we had had more time.

THE CHAIRMAN: We understand that.

MR. THOMSON: As at the end of April, 1958, Texaco's land holdings comprised 5,455,639

acres in reservations, permits and licences, and 1,895,947 acres in Leases, all expressed in net interest acres. It is now operating 375 oil wells, equivalent to 363 net interest wells. Potential capacity of these wells at MPR rates is 136,000 barrels per day, due to the high MPR's of the Bonnie Glen and Wizard Lake fields.

In January, 1957, Texaco's gross production was 52,000 barrels per day, the highest for the year, while in November, the lowest for the year, it had dropped to 20,000 barrels per day. Average gross production for 1957 was 38,000 gross barrels per day, of which Texaco's net interest before royalties was 35,400 barrels per day.

By April, 1958, gross production had dropped to 17,900 barrels per day, approximately equal to the total economic allowable of 17,350 barrels per day. The reason for this fluctuation in production is that the company's principal production is from the Bonnie Glen and Wizard Lake fields, both of which have high potentials and are, therefore, affected considerably by the allocation formula employed in Alberta.

Texaco operates a pipeline from Rimbey, through Westerose, Bonnie Glen and Wizard Lake to Edmonton. At Rimbey it connects with the

pipeline owned and operated by Rangeland Pipe Line Company and buys at Rimbey all the oil transported by Rangeland. It also buys, at the wellhead, all the oil produced at Westerose, Bonnie Glen, Wizard Lake and Glen Park and, therefore, owns all the oil in the line. This oil is sold in Edmonton at acquisition cost, plus pipeline charges.

Total amount of crude oil moved through this line in 1957 was 18,936,000 barrels of which 10,663,000 barrels, or 56 per cent was produced by Texaco. Disposition of this oil was as follows:

McColl-Frontenac, Edmonton Refinery	3,761,000 bbls.
British American, Edmonton Refinery	869,000 bbls.
British American, Pacific Coast	3,214,000 bbls.
Imperial Oil, Edmonton	1,904,000 bbls.
Standard of B.C.,Vancouver	2,261,000 bbls.
General Petroleums, Ferndale, Wash.	4,737,000 bbls.
General Petroleums (a/c The Texas Co.) Ferndale, Wash.	2,190,000 bbls.
	18,936,000 bbls.

Total oil moved through this line from January to April inclusive, 1958, was 5,149,000 barrels of which 1,971,000 barrels or 38 per cent

was produced by Texaco.

Disposition was as follows:

General Petroleums, Ferndale, Wash.	1,281,000 bbls.
General Petroleums (a/c The Texas Co.) Ferndale, Wash.	543,000 bbls.
McColl-Frontenac Oil, Edmonton Refinery	1,370,000 bbls.
British American, Pacific Coast	1,171,000 bbls.
Imperial Oil, Pacific Coast	842,000 bbls.
	5,207,000 bbls.

Texaco bought 58,000 barrels of line fill for sale to Imperial, which accounts for the difference between sales and throughput through Texaco's line.

In addition to the above 841,000 barrels of Pembina crude and 484,000 barrels of Saskatchewan crude was purchased for sale to Regent Refining at Port Credit. Total sales for the period, therefore, totalled 6,532,000 barrels.

Total Texaco produced oil during this four-month period, i.e. inclusive of McColl's royalty and working interest oil, was 3,177,000 barrels. Total Canadian crude refined by McColl or sold to The Texas Company, Puget Sound, was 3,238,000 barrels or 102 per cent.

Texaco Exploration Company is not affiliated with McColl-Frontenac Oil Company

Limited. Each is a subsidiary of The Texas Company. Texaco is in only the exploration, production and transportation business. McColl is principally engaged in the refining and marketing business, but also is an explorer and producer in Canada. In their respective businesses the two companies act independently, and in fact, Texaco regards McColl as it would any other competing company.

With respect to the construction of a pipeline to transport Western Canadian crude to Montreal, Texaco feels it to be unwise to invest hundreds of millions of dollars in a pipeline to service a market which is not a natural market for Western crude. Ontario, the largest consuming province, the North Central United States and the Puget Sound area, which is already connected to Western Canada by Trans Mountain Pipeline, are the growing and expanding natural markets for this oil. As to growth in this area -- and we predict it will grow -- the Montreal market will become more and more competitive with these natural markets with the inevitable result that the project will not recoup the original pipeline investment, let alone emerge as a profitable venture.

If the Western producers and Montreal refiners are, by governmental intervention, required to enter into 20-year contracts at

predetermined prices to assure adequate throughput to finance the pipeline, as the demand in the natural outlets increases, the results will be, either to fix the price of all Canadian crude for a period of twenty years, or to create a two-price structure -- one price for Montreal, and another price for the other markets, which would cause inequities and a chaotic pricing situation.

Either of these results would be detrimental, not only to Western producers, but to the entire Canadian economy. In any event, Texaco believes it would not be of benefit to Western producers to be tied by long-term contracts to one market.

MR. PATTILLO: Mr. Thomson, I will address the questions to you and either you or any of your group can answer them as you may select.

You have given us information as to the MPR in the present economic allowable of the Texaco Company. Where does your parent company have refineries either in operation or being built which are in proximity to the Trans Mountain pipeline or to the Provincial pipeline?

MR. THOMSON: One is being constructed now in Washington in the Puget Sound area.

MR. PATTILLO: And will have a capacity of what?

MR. THOMSON: Forty thousand barrels a

day.

MR. PATTILLO: In addition to that does the Texaco Company have a refinery in the San Francisco Bay area?

MR. THOMSON: No.

MR. PATTILLO: In the Los Angeles area?

MR. THOMSON: Yes, it has one there, Wilmington.

MR. PATTILLO: What is its capacity?

MR. THOMSON: Sixty thousand barrels a day.

MR. PATTILLO: Now, in addition to those two refineries in the West Coast, does it have any refineries in the Middle West States?

MR. THOMSON: Yes, one in Lockport, Illinois.

MR. PATTILLO: And where is that in relation to Chicago?

MR. THOMSON: It is about twenty miles away.

MR. PATTILLO: And what is its capacity?

MR. THOMSON: I am afraid I have not got that but I seem to remember that McColl-Frontenac gave a list of all the refineries and their capacities.

MR. PATTILLO: Now, do you know what is the source of the crude that the refinery which is being built at Puget Sound will use?

MR. THOMSON: No, I do not know that. I do not think that anybody can answer that question at the present time because the refinery has not been built and I do not think it has yet been decided what crude will be used. I believe it will be from several sources and that a certain amount of it, a certain share will be Canadian crude, but I do not think anybody is able to say at this present moment.

MR. PATTILLO: In your brief you have, on page 2, General Petroleums (a/c) The Texas Co. Ferndale, Washington, 2,190,000 barrels. Will you please explain what you mean by that? Was that being shipped to General Petroleums who were processing it for The Texas Co.?

MR. THOMSON: That is right, sir.

MR. PATTILLO: So it was really for The Texas Co. that this crude went down?

MR. THOMSON: Yes.

MR. PATTILLO: Now, am I correct in thinking that of the 18 million barrels of Texas crude that was produced and sold in Canada last year approximately 6 million of it was used by The Texas Co. or one of its subsidiaries; that is the 3,700,000 that McColl-Frontenac used and the 2,190,000 that The Texas Co. used at Ferndale?

MR. THOMSON: That is correct, sir, except that the 18 million is not our total production, that is the total amount of oil moved on that line. Of that 18 million, 10,600,000 was produced by Texaco, but in addition to that we have production at Pambina, Sturgeon Lake and so forth. Our production last year was a little bit short of 14 million barrels all told.

MR. PATTILLO: Now, the result, really, is that you produced 14 million barrels, of that your companies used anequivalent of 6 million barrels,

and the remaining 8 million barrels was sold at posted prices.

MR. THOMSON: That is correct.

MR. PATTILLO: Since July last year, when the market began to fluff off, has your company, the Texaco Company, or The Texas Co. done anything to investigate the possibility of obtaining additional markets for Canadian crude?

MR. THOMSON: They have done considerable investigation. I do not know what has resulted from that, but, naturally, they are very greatly concerned with the fact that our production, and thereby our sales, are decreasing. What action they have taken or, at least, what action they have decided can be taken to help this, I am not in a position to say.

MR. PATTILLO: Can you tell us whether any inquiry has been made as to the possibility of exchange of oil?

MR. THOMSON: I don't know what has been done in that respect, sir. You see, here we are simply an exploration and producing company.

MR. PATTILLO: Well, will you tell us what you can, from inquiries you have made of head office, as to what has been considered and what they are thinking of doing?

MR. THOMSON: Well, on several occasions I have asked about the Puget Sound as to whether

they intended to run entirely or partially Canadian crude, and the answer has always been that the matter is not yet decided, that the refineries are not yet on stream, and it has not yet been decided what crudes they will run. I think it is certain that they will run on some Canadian crude.

MR. PATTILLO: Did the company tell you that it was certain they would run some Canadian crude?

MR. THOMSON: I think the word was "fairly" certain. There wasn't any definite undertaking as to any quantity, but undoubtedly there would be some Canadian crude processed at the Puget Sound refinery.

MR. PATTILLO: Now, in your organization here one of the gentlemen, Mr. Logan, is in charge of crude oil purchases and sales.

Mr. Logan, can you tell us what you have done to try and increase the sales of the crude oil of Texaco Exploration Company?

MR. LOGAN: We have kept a constant watch on the market conditions, pricing, the volumes and our cost factors and supplied our head office with the information so that they could consider any possible movements.

MR. PATTILLO: So you have just been watching the situation?

MR. LOGAN: Well, we have made comparative

studies and submitted the information for further review.

MR. PATTILLO: And you have had no report from head office of what they have done on the work which you did.

MR. THOMSON: If you wish, sir, we could communicate with head office and ask if they could give us a statement on that. At the present time we are not able to answer it more specifically than we have done.

MR. PATTILLO: I would like you to communicate with head office and I would like you to ask them to submit to the Commission (if they prefer, they can submit it directly to the Chairman) information as to what The Texas Co. is prepared to do and try and increase the market for Canadian crude in the way of using Canadian crude in their refineries and in the way of exchanges or any other methods that they can bring forward. Will you please do that, Mr. Thomson?

MR. THOMSON: I will do that, sir.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: Mr. Thomson, you are the Vice President of Texaco Exploration.

MR. THOMSON: Texaco Exploration Company, yes.

MR. FRAWLEY: That is wholly owned by The Texas Co.

MR. THOMSON: Yes.

MR. FRAWLEY: It is not a share proposition; you are completely a Texas wholly-owned subsidiary?

MR. THOMSON: Yes.

MR. FRAWLEY: Mr. Berthiaume is the Vice President and General Manager. Has he been long with the company?

MR. THOMSON: No, he came here on the 1st of December, 1957.

MR. FRAWLEY: From where did he come?

MR. THOMSON: From New York.

MR. FRAWLEY: What was he doing in New York?

MR. THOMSON: He was assistant to the Vice President in charge of Production.

MR. FRAWLEY: Is he of The Texas Co.?

MR. THOMSON: The Texas Co., yes.

MR. FRAWLEY: Is he still an officer of The Texas Co.?

MR. THOMSON: No. Perhaps Mr. Berthiaume could answer those questions himself.

MR. BERTHIAUME: No, sir, I am not.

MR. FRAWLEY: Now, I am interested chiefly in the last two pages of your brief in which you declare yourself as being opposed to Alberta taking the Quebec market, and that has invited some questions from me, Mr. Thomson.

MR. THOMSON: Yes.

MR. FRAWLEY: You say that is not a natural market, and you say that Ontario, the north central United States and the Puget Sound area are the growing and natural expanding markets for our crude.

MR. THOMSON: Yes.

MR. PATTILLO: Let's examine that now. The Puget Sound is certainly subject, as we have seen it recently, to pressures of the oil block in Congress of the United States.

MR. THOMSON: Yes.

MR. FRAWLEY: You have told us that even so far as your own operation is concerned, nothing has been decided, you don't know how much of our crude The Texas Co. will take when that refinery at Anacortes goes on stream.

MR. THOMSON: That is correct, because the refinery is not yet built, it is not yet on stream.

MR. PATTILLO: But, in any event, The Texas Co. has not looked that far ahead to say that they will take Alberta crude and the Alberta crude will be the main source of their supply.

MR. THOMSON: I am not an expert on refining, but what I suppose will happen is when they first go on stream they will make trial runs with various different crudes to determine what

is the best for the purpose.

MR. FRAWLEY: And then we will add something else to that. Did you hear Mr. Knox suggest last Saturday morning that Indonesian crude was a very fine crude and it could be put competitively into Puget Sound, competitively with Alberta crude?

MR. THOMSON: I did not hear him say that, but I understand that to be correct.

MR. FRAWLEY: So you wouldn't disagree with that observation of Mr. Knox?

MR. THOMSON: No.

MR. FRAWLEY: Now, with that situation which you have just described to me, do you still call that a natural expanding market for Alberta crude?

MR. THOMSON: Yes. I think one reason is that it is very much closer than Montreal, and it is also connected with a pipeline from Alberta. It is a natural expanding market, not perhaps in the immediate future, not in the next few months, but in the next few years I think it is.

MR. FRAWLEY: You are quite right, it is nearer than Montreal, there is a pipeline actually there, there is a lateral that is going into Ferndale, but you can't say how much of that crude going through that lateral you are going to take.

MR. THOMSON: Because the refinery is

not yet built.

MR. FRAWLEY: I am just challenging your statement, that it is anything but a natural market on your own evidence.

MR. THOMSON: I can't see that I have given any evidence of the fact that it is not a natural market. All I have said is that we don't know at the present time what percentage of that Puget Sound refinery will be supplied by Alberta crude.

MR. FRAWLEY: Now, there is one other element that I suggest takes it out of the class of a natural market, and that is what has been called the commercial preferences of the United States internationally integrated oil companies, and I say that that is another existing fact of life that Alberta crude has to buck to get into the Puget Sound; isn't that so?

MR. THOMSON: Yes, sir; the oil business is a very competitive one.

MR. FRAWLEY: Now, we go to the Middle West, the north central market, and while that would seem to be somewhat the prerogative of my friends in Saskatchewan, I have a few questions about it. There the competition is the mid-continent crude that might be available by pipeline from Louisana and Texas, from Illinois, perhaps. That market is vulnerable to crude that can come from pipeline in various parts of the United States.

MR. THOMSON: Yes.

MR. FRAWLEY: There seems to be some possibility at the moment for Saskatchewan crude in the St. Paul area. You wouldn't like to venture an opinion as to whether it might be difficult to hold that market?

MR. THOMSON: I don't know very much about that market. I would not think so because I believe that those refineries there have been built, have been designed to run on Saskatchewan crude, that Saskatchewan crude is particularly suitable for their operations, and I would therefore think that they would continue to take it.

MR. FRAWLEY: That would seem, if I might say so, a perfectly logical observation, Mr. Thomson, and that might take care of the amount of Saskatchewan crude that is going down in there, but of course it doesn't do anything for the area where the biggest shut-off is, namely Alberta?

MR. THOMSON: That is correct.

MR. FRAWLEY: Now, when we come to Ontario, because you mention Ontario as the largest consuming province, I hate to talk any more about the Sun Oil Company but there you actually have in our own country a refinery set-up that does not take our crude. It still prefers and still is exercising it's perfectly admitted right to take any body's crude You are aware of that,

are you, Mr. Thomson?

MR. THOMSON: I don't know very much about Sun Oil's operations in Sarnia, but I believe they are taking a substantial quantity of Canadian crude now, but I may be wrong.

MR. FRAWLEY: I did not think it was substantial. I thought that the record really was to the contrary, that some Canadian crude was going in, but the substantial part was still United States crude. I think I read that from the last Sun report.

MR. THOMSON: I am afraid I cannot speak for Sun and I really don't know.

MR. FRAWLEY: I only point that out as supporting what I put to you as a very serious consideration, and that is the commercial preference, and I am understanding them and agreeing with them, the commercial preference of the United States oil companies in their own country because you are suggesting that the United States will be a fine market for our crude.

MR. THOMSON: Yes, sir, but I think that a company that operates worldwide operations in many countries and purchases oil from many different countries has to some extent to balance the crude that it takes from each. I think it is under pressure from each country to take its crude and I think that it has the very delicate task of

trying to balance its take from all.

MR. FRAWLEY: Because it has to have regard for its crude reserves in various parts of the world, I put it to you that those refiners that are subject to this sort of policy considerations are not a likely market for Alberta crude compared to a market within the confines of our own Dominion of Canada. That is what I am putting to you; what do you think of that?

MR. THOMSON: I can't say that I agree with you, Mr. Frawley.

MR. FRAWLEY: The tenor of your brief would indicate that you did not agree with me. You are completely, and you must forgive me for saying so but I find it difficult to resist saying it, you are completely an emanation of the Texas Company?

MR. THOMSON: What exactly do you mean by that, Mr. Frawley?

MR. FRAWLEY: I use the word "emanation" as meaning nobody else is there. There is no Canadian money in Texaco Exploration Company? It is just the Texas Company?

MR. THOMSON: May I say, oh, yes, we are a wholly-owned subsidiary.

MR. FRAWLEY: It is a good, simple position for you to be in anyway.

MR. THOMSON: Oh, yes.

MR. FRAWLEY: Thank you very much, Mr. Thomson.

THE CHAIRMAN: Thank you very much, Mr. Thomson. The Commission appreciates that we did not get our clutches on you sufficiently in advance for you to prepare one of these big submissions, but this one is very well done. Thank you very much for coming with your colleagues today.

MR. THOMSON: Thank you, Mr. Chairman.

THE CHAIRMAN: Gentlemen, I suggest we have a ten-minute break.

---Short recess.

Submission of

THE BAYLEY SELBURNE GROUP

Appearances:

Mr. J. P. Gallagher) Mr. T. S. M. Gard)	- Dome Exploration Co.
Mr. E. Galvin	- Medallion Petroleum Ltd
Mr. N. W. Nichols	- Great Plains Development Company of Canada Ltd
Mr. A. E. Feldmeyer	- Canadian Superior Oil of California Ltd
Mr. W. A. Friley	- Bayley Selburne Oil & Gas Ltd
Mr. W. E. Powell	- Canadian Husky Oil Ltd
Mr. Vernon Vansant, Jr.	- Amurex Oil Company
Mr. A. F. Beck) Mr. Hahog)	- Canadian Export Gas Ltd Banff Oil Limited

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THE CHAIRMAN: Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman.

We now propose to take up the submission of what I call The Bayley Selburne Group. You will recall that at the hearings in February this group submitted a brief which was then marked and on that occasion we had them merely take up the question of gas, reserving the question of oil for this hearing.

If these gentlemen would now come forward.

Mr. Chairman, Mr. Gallagher will be acting as spokesman for the group. The brief

which was marked before, bears number C-27-4.

THE CHAIRMAN: Mr. Gallagher.

MR. GALLAGHER: Mr. Chairman and members of the Commission, we appear before you today as spokesmen for a group of independent producers all of whom are members of the Canadian Petroleum Association and all of whom support the brief submitted by the Association. I have with me the following gentlemen: Mr. Galvin, who will endeavour to answer specific questions on gas; Mr. Gard, who will endeavour to answer specific questions on taxing. In addition we have seven additional representatives of the companies that are listed on the front page of the brief.

As you are aware our brief was prepared for submission in February of this year and at that time Mr. Bayley of our group presented our recommendations on natural gas. Following the presentation Mr. Pattillo requested that we give further consideration to certain specific phases of natural gas and with your permission we would like at this time to read our reply.

We were asked to:

(1) Suggest a possible formula for determination of quantities of natural gas that could be safely exported from time to time from Canada.

(2) Advise the Commission on problems

presented to the industry for disposing of large volumes of liquid petroleum gas, sulphur and other by-products resulting from the production of sour wet gas; and

(3) Supply the Commission with information regarding the high load factors inherent and economically necessary in the operation of large diameter natural gas transmission lines -- and their effect on local supply.

In response to Mr. Pattillo's request, we have considered further these three subjects and would comment to the Commission as follows:

1. We have already stated that we agree with the principle that the natural gas requirements of Canadian consumers within economic range of pipeline facilities should be satisfied in any project contemplating gas export.

   We suggest consideration of a formula which would permit the export of that amount of natural gas, as of the date of the export application, that was in excess of 25 years' supply of existing reserves for available economic markets under contract. We believe this would provide adequate safeguards for a continuing supply for domestic markets and would be both safe and realistic

in promoting growth and consequent economic benefits of a healthy expanding industry.

Based on past experience we believe that it will not be necessary to make allowance for future growth in markets because the future growth trend in available reserves, under competitive marketing, will more than offset the additional domestic requirements.

The base date for determining both available reserves and the available economic markets under contract should be the date of the filing of an application for export of gas.

2. When and if the volume of natural gas taken from fields which also yield liquid petroleum gases and sulphur reaches the point where the available supplies of such by-products are in excess of local market requirements, adequate markets outside the Prairie Provinces must be developed. Gas liquids in excess of these markets can be converted to dry gas fuels or returned to the reservoir. Sulphur in excess of market demand is readily stock piled.

In the case of both these commodities, the handling and storing of them, pending sale, will be an added cost to the producer, there-

by lengthening the period of time required to pay out the investment in the field to the extent that initial markets are not available.

3. There are many advantages to consumers from the operation of natural gas transmission lines at a high load factor. When the line is able to operate throughout the year at a high percentage of its capacity, there is considerable saving in operating cost and line amortization per cubic foot of gas carried. These costs remain relatively constant regardless of the volume of gas being transmitted. The larger and more constant the volume of throughput, the lower the unit cost of the gas to the consumer.

In all but the shortest pipelines, transmission costs make up a greater portion of the cost of service to consumers then the price paid producers for gas in the field. Therefore, high load factor operation of transmission lines, or the spreading of fixed costs over a greater number of cubic feet of gas, generally permits payment of more equitable prices to producers with a minimum effect on cost to consumers -- which latter cost would otherwise be substantially higher.

High load factor operation of transmission

lines also provides larger and surer supply of gas to more consumers. Although we recognize that it cannot eliminate demand charges for peak loads, such charges can be reduced through operation of such high load factor lines.

Mr. Chairman, that is the end of our supplementary gas line submission.

I would now like to go back to our brief and highlight the role of the independent. In presenting the remainder of our brief covering oil, taxation and finance we would appreciate it if your court reporters would continue to take notes. We have made minor changes in the brief.

Now, for the purposes of this submission, an independent producer is one which is of minor significance in the total world industry. The Canadian independent is a company which depends upon the oil and gas resources of Canada for its income. That is, of course, in contrast to the companies with operations or affiliations which are international in scope.

An international company, if it finds production restricted in one country, can draw more heavily from reserves located elsewhere. We cannot do that. If reserves in one area or country appear insecure for political or military reasons, an international company can produce its

reserves faster in the area which is insecure and retain its reserves in areas which appear safer. We cannot do that.

Since our area of interest is here in Canada, we are more directly influenced by whatever policies are in effect in Canada. Our economic and political interests are more closely identified with those of the provinces and the nation in which we do business. For this reason we feel that the views of the independent producers are of unique importance to the Commission.

Despite our limitations it is a fact that the independents in the past nine years have drilled almost half of all the wildcat wells in the Prairie Provinces, which indicates that the independents are a dynamic force in the development of Canada's petroleum resources.

Now, with regard to oil: your Commission sits at a critical time. We are in the downswing of the business cycle. Since the end of World War II there have been two minor recessions, 1949 and 1954. In 1949 Canada's oil production was still expanding to serve available domestic markets. In 1954 the effect of the recession was felt in the Canadian oil industry in the clamour of United States oil producers for restrictions.

Since that time, voluntary restrictive measures have been devised. Now, in the downswing of 1957-58, they may be made mandatory.

There is an apparent over-supply of oil in the United States today. It is natural, if not statesmanlike, to seek to restrict the supply of oil in these circumstances -- and that is what United States oil producers have done. But, however we may deplore the symptoms of the business cycle, it is with us -- and so are restrictions on the markets for Canadian oil exports.

We recognize that in the long run we should be able to export large quantities of oil to the United States -- some say as much as 1,600,000 barrels per day by 1980.

What really concerns us now, is how long will it be before Canadian oil will again move more freely over the border. If limitation of oil imports is made law, an early reversal of this philosophy can hardly be expected, and Canada's oil exports to the United States could be restricted indefinitely.

To the extent that markets for Canadian crude oil are restricted, the exploration and development of Canada's petroleum resources will be curtailed. From our earlier remarks about the financial problems of the independents, it is apparent that, under restrictions, the following will probably occur:

(1) The independents will not be able to carry on their share of exploration, and they will retain only a diminishing share of the country's reserves, production and acreage.

(2) Throughout Western Canada, there will be a drying up of oil exploration and development, with all that that implies in lower revenues, lower royalties, lower personal income, reduced capital investment and the adverse effect on allied services and related industry.

Therefore we see that the present pressure of slackening economic activity calls for immediate action.

We can make decisions of a business or economic nature. Where this is not possible, we can explore the opportunities which might be created by actions of a political nature. In either case, these can relate to domestic markets for the product, or they can be directed to expanding our markets outside the country.

A careful consideration of these various avenues leads us to make the following suggestions to the commission:

We suggest that the pressing urgency of the situation points out the need for immediate and renewed diplomatic representations at the very highest levels of government in an attempt to come to an agreement with the United States government which

will permit us to expand our markets for oil on a sound and continuing basis.

It is on record that the Canadian government does not agree with, nor admit the validity of, the concepts of defense used by the United States to justify quotas on oil imports. Perhaps it remains to consider whether real advantages continue to accrue to Canada by our willingness to accept the principle of North American defense on a continental basis when this principle is apparently not accepted elsewhere. Perhaps if these matters were dealt with by a Treaty between our two countries, our relations would not continually be upset by administrative edict.

The United States government may not be able to give Canadian oil preferential treatment over oil produced in other foreign countries, unless it can be persuaded to include oil in both our countries as an item of continental defense recognized in a Treaty.

If representations along this line are unsuccessful we should seek an agreement which will move more Canadian oil into our logical markets in the mid-continent area of the United States and the Pacific Northwest. In exchange, we could continue to accept non-Canadian oil into the markets of Eastern Canada.

At the very least we should seek some

assurance that we will not continue to be regarded as a marginal supplier in the very areas we can serve most economically. The United States mid-continent area, including Chicago-Detroit-Toledo, can be readily served by Canadian crude, because our oil-producing areas are so close to the mid-continent market. The Pacific Northwest, because it has access to tankers from abroad, may not find us the cheapest source at all times, but on a long-term basis we are the closest and the safest and we are a logical supplier. The logistics of the movement of oil do not change simply because natural markets lie across a political boundary. They can be interfered with, however, by a tariff, such as the $10\frac{1}{2}$ cents per barrel tariff which the United States now imposes on Canadian crude. We suggest to the Commission that Canada should seek to persuade the United States that this tariff has no place in the relationship between our two countries, and should be eliminated.

As far as our markets here in Canada are concerned, we are now supplying all refineries as far east as Toronto, and if the refineries in that area ultimately supply the requirements of all Ontario, we stand to benefit.

We sympathize with the people and industries of Quebec and the Maritimes when we consider their exposed position in the event foreign oil is

is unobtainable. The seizure of the Abadan refineries a few years ago and the closure of Suez in 1956 caused very serious disruptions. Already in 1958 we have seen a revolution in Venezuela, the partial seizure of the oil producing and refining facilities in Indonesia by the national government, and the formation of disturbing political alliances in the Arab states. If the markets of eastern Canada were entirely served by Canadian crude oil, these events would cause less concern, and on that basis, the possibility of a pipeline to the Montreal market merits serious consideration.

Now, Mr. Chairman, I would like to turn and refer you to page 14 of our brief, the tax and finance section.

With your permission, we would like to comment briefly upon some matters relating to taxation and finance. Whether oil or gas holds more attraction to us, we cannot explore for either of them without adequate funds. To some extent we will be able to generate more cash out of earnings if certain principles regarding taxes are accepted and implemented.

The question of taxation in the petroleum industry was reviewed before the Royal Commission on Canada's Economic Prospects -- The Gordon Commission -- by several oil companies, and the Commission itself put in hand a study of taxation by

an eminent accountant. (Grant Glassco, "Certain Aspects of Taxation Relating to Investment in Canada by Non-Residents, Royal Commission on Canada's Economic Prospects, Queen's Printer (Ottawa: 1957). His conclusions as to taxation of the petroleum industry are submitted as Appendix 2 to our brief today.

In another study, prepared by the staff of the same Royal Commission, the authors had this to say:

> "In the petroleum industry the differing "tax treatment in Canada and the United States "with respect to such matters as depletion "allowances and property costs -- when combined "with the ability of United States investors in "the early stages of a development program "to offset losses on Canadian operations "against income otherwise taxable in the United "States -- would appear to give United States "companies operating in Canada varying degrees "of tax advantage compared to their Canadian "counterparts." (Brecker and Reisman, op. cit. p. 117 para. 2.)

In August 1957 the Canadian Petroleum Association, representing 97 per cent of the industry's production, submitted to the Government of Canada an extensive brief containing five specific proposals in the field of petroleum taxation. As members of

the Canadian Petroleum Association, we endorse this submission, and we place it on the record of this Commission by including it as Exhibit 2.

It is, of course, well understood that taxation of the petroleum industry in Canada tends to favor companies based in the United States over a purely Canadian producer, and this and other taxation matters will no doubt occupy some of the Commission's time.

What we would like to dois to suggest some other possibilities in the broader field of finance which are important to us because they would give us access to some new and willing sources of funds, but their importance goes far beyond the oil industry and relates to the energetic development of Canada as a whole.

In the first place we all recognize now that Canadian capital can finance vast undertakings. There are substantial sources of capital in Canada if they can be unlocked.

The independent producer of oil and gas relies in large part on risk capital supplied by investors. We are more vulnerable than a company with international sources of funds, because we can only raise new equity capital effectively when conditions in the Canadian petroleum industry are good, and in addition, investor confidence is high. When production is restricted, and the

payout period becomes longer, the present worth of our reserves goes down, and our market value goes down with it, affecting investors across Canada. Under these conditions we cannot raise new equity capital on reasonable terms, even though we might have opportunities at such a time to use it to advantage.

In the United States, private individuals and companies not in the petroleum industry play an active role in supplying venture capital for exploration, not only in their own country but in Canada and elsewhere. Furthermore, nearly all this capital flows to the independent producers.

It is desirable that potential investors in Canada as well should participate in our industry. We suggest that changes in our personal and corporate tax legislation may be the way to make this possible, and that the Commission might recommend such changes by the consideration of the appropriate authorities.

With respect to long-term or borrowed capital, the assets of the life insurance companies and other institutions are large and expanding rapidly. May we suggest that the Commission give consideration to the advisability of recommending changes which would make more of these funds available to the oil and gas industry. For example, existing regulations might be altered to permit these institutions to make long-term loans against production, or to finance the purchase of proven reserves in the ground. If incentives are necessary to stimulate this type of investment, such incentives are worthy of study by the appropriate authorities of the Government.

Some short-term loans are being made against production by the chartered banks, but they run only for periods up to four or five years. This term is not realistic when related to the lengthened pay-out periods brought about by the currently reduced oil allowances and presents an obstacle to the ability of an independent oil company to finance

its development operations. If the chartered banks are not prepared to make medium term loans, we submit that the Industrial Development Bank, which was formed to fill such gaps in the country's financial structure, should enter this loaning field.

The revenues that will be created by vigorous and progessive action in these fields will not lie idle, but will spread throughout the economy of Canada. That portion of the earnings from oil and gas, which accrues to the independent companies, will certainly be fully employed. Building up idle cash is not one of our policies. We will be quick to use our available funds to explore for and develop new resources, new reserves, not only in this part of the country but in the northland which we feel offers a challenge and great opportunities.

The proper incentives, and active use of capital will create an oil and gas industry in Canada which will bring great material benefits to the people of this country.

Now, Mr. Chairman, in conclusion, we would just like to summarize our combined brief. We have endeavoured to show the economy, how the independent oil companies have played an important part in the development of our industry in the past few years in spite of limitations of markets, and the fact that Canadian capital was not as freely available

as it might have been.

As independent producers, our interest is closely identified with the national interest. For this reason we feel justified in making certain recommendations to the Commission. We will summarize them herewith:

(1) We urge strong representations at the highest Government levels to expand our United States markets for oil. If these United States markets are not developed on a continuing and a long-term basis in a reasonable period of time, then we propose that immediate consideration should be given to the most practical means of commencing movement of western Canadian crude oil into the Montreal market;

(2) We recommend that protective steps be taken to stop the movement of refined petroleum products into Canada wherever these or comparable products are being manufactured in Canada;

(3) We urge immediate approval of expanded markets for our surplus natural gas with adequate protective measurements for Canadian people;

(4) We have outlined and we strongly recommend specific changes in the field of taxation and finance which will help mobilize

Canadian capital to develop our oil and gas reserves in the national interest.

Thank you.

THE CHAIRMAN: Thank you very much, indeed, Mr. Gallagher. Mr. Pattillo?

MR. PATTILLO: Mr. Gallagher, I will address the questions to you and you can just designate any person whom you may wish to answer the question. First of all, your group of companies; am I correct in thinking that they are all Canadian companies operating either in Alberta or in Saskatchewan?

MR. GALLAGHER: Yes, Mr. Pattillo. They all are Canadian companies operating in western Canada.

MR. PATTILLO: What about the share control of these companies? Is there any company whose share control is situated outside of Canada?

MR. GALLAGHER: Mr. Pattillo, I am not in a position to clarify that statement in respect of all the companies listed I would suspect that in many of them, the share control lies elsewhere other than Canada. However, I would like to add that I do not feel that that diminishes our interest in what happens in Canada, in the fact that a Canadian independent is dependent on what happens here. In addition, I would like to say that the trend of Canadian investment into risk taking equity might

gradually reverse that control position.

MR. PATTILLO: What I was going to ask was whether any of the companies have affiliates in the United States that are in the producing business?

MR. GALLAGHER: Yes. There is an affiliation between, as I understand, Husky in the United States and with Canadian Superior. Those are the only two that I know of, and I would like to clarify that by asking Mr. Gene Powell, who is here representing C nadian Husky.

MR. POWELL: That is not true. The only point is interlocking directors. We have two interlocking directors, otherwise there is no connection.

MR. GALLAGHER: For Canadian Superior, Mr. Feldmeyer is here.

MR. FELDMEYER: Superior Oil Company of California owns 51.4% of Canadian Superior.

MR. PATTILLO: Can you tell me what position the Husky Company and the Superior Oil Company of California have taken in the United States regarding the importation of Canadian crude into the United States?

MR. FELDMEYER: Well, Superior Company are not operating any refineries or marketing business. It has little reason to be involved in the import of Canadian crude.

MR. PATTILLO: Do you know whether it is

a member of the Independent Producers Association of the United States that has been making representations against the importation of foreign crude into the United States?

MR. FELDMEYER: I don't believe I can answer that, sir.

MR. POWELL: Husky is.

MR. PATTILLO: Husky is?

MR. POWELL: Yes.

MR. PATTILLO: Now what about your MPR in the aggregate of these nine companies? Can you tell us what that is, Mr. Gallagher?

MR. GALLAGHER: I don't have the figures of the MPR, but I do have in front of me a rough estimate of the current production of these companies, and that is approximately 30,000 barrels per day represented by the nine companies.

MR. PATTILLO: Do you know whether any of the nine companies are seriously affected by the present prorationing policy in Alberta? The market demand?

MR. GALLAGHER: I would say that all nine companies are seriously affected, Mr. Pattillo, to the extent of at least approximately 50%. In other words, their current production is on the order of 50% of what their allowables would be or their MPR would be.

MR. PATTILLO: Now what steps have the

companies, as a group or singly, taken since July of 1957 to endeavour to obtain additional markets for Canadian crude?

MR. GALLAGHER: To my knowledge, Mr.Pattillo, the group have not taken any steps toward enlarging our markets in the fact that all but one of our group are producers, explorers and producers of oil and not marketers and refiners. The marketer and refiner among our group is Husky, Canadian Husky Oil.

MR. PATTILLO: It operates a refinery at the head of the lakes?

MR. GALLAGHER: Yes, and a second one at Lloydminster and one at Moose Jaw.

MR. PATTILLO: So they have three altogether?

MR. GALLGHER: Husky has three refineries altogether, yes. Could Mr. Gene Powell answer that?

MR. POWELL: That is correct, at the present time,

MR. GALLAGHER: And all those refineries, Mr. Pattillo, have been developed in recent years.

MR. POWELL: Since 1947, the first one.

MR. PATTILLO: And when is the most recent one brought on stream?

MR. POWELL: The most recent one at the head of the lakes was purchased, I believe, about two years ago.

MR. PATTILLO: Now then, apart from Husky have any -- although the rest of you are producers only -- have you individually, or as a group done anything to try and increase the markets for Canadian crude?

MR. GALLAGHER: On behalf of Dome Exploration, Mr. Pattillo, we have certainly explored the possibility of additional oil moving into the Minneapolis refinery. We have also explored the possibility at the head of the lakes in the United States, on the Superior side. We have been eminently unsuccessful in the fact that there are a number of matters, mainly voluntary restrictions which have prevented any enlargement of markets.

MR. PATTILLO: So you have been in contact with the American refiners in that area, but they have told you that because of the restrictions, the voluntary restriction, they could not increase their take of Canadian crude, is that it?

MR. GALLAGHER: That is essentially it.

MR. PATTILLO: Have any of the other companies done work similar to the work done by Dome?

MR. FRILEY: Bailey Selburne has had discussions in general along these similar lines. As strictly independent producers, we have to sell our oil to the larger companies and we feel pretty well tied to that situation. We have not made progress to date.

MR. PATTILLO: Are any of you in a position where you might be able to make an exchange arrangement with companies that are bringing foreign crude into Canada at the present time?

MR. GALLAGHER: Speaking on behalf of Dome I would say we are not in that position. We are solely operating in Canada and have no affiliations outside.

MR. PATTILLO: What about Superior Oil of California? Does it operate in Venezuela?

MR. NICHOLS: It does now.

MR. PATTILLO: And it has a substantial production there?

MR. NICHOLS: I do not know how many wells are completed to date, but I think five or six.

MR. PATTILLO: Can you give us any idea as to what its daily production is?

MR. NICHOLS: The last information I had was that they were in the neighbourhood of 10,000 barrels a day.

MR. PATTILLO: Do you know where that production from Venezuela is going?

MR. NICHOLS: Production was sold at the wellhead and it is my understanding that it was going to small refiners in the Gulf Coast and Southern States area.

MR. PATTILLO: Would you be prepared to

inquire from your head office in California as to whether they would be willing to give consideration to an exchange of oil whereby they would be making arrangements with refiners that are going into the Montreal market at the present time with foreign crude -- to exchange oils so in effect the equivalent of Canadian oil would go into the Montreal market?

MR. NICHOLS: I would certainly be prepared to make inquiries.

MR. PATTILLO: Now, you people speak about going to the Montreal market. Would you as a group or individually be prepared for the purpose of going to the Montreal market to enter into long-term contracts regarding your supplies for that market?

MR. GALLAGHER: Would you like us to speak individually as companies?

MR. PATTILLO: Yes.

MR. GALLAGHER: I will lead off for Dome: Dome would certainly be prepared to enter into selling our crude, part of our crude, in the Montreal area on a long-term basis provided the price is what we think or feel is practical, fair and equitable.

MR. PATTILLO: Perhaps you would just explain -- what do you consider is a fair and equitable price? Ha e you something in mind as to

how this price is to be determined?

MR. GALLAGHER: We would, of course, have to know, Mr. Pattillo, the volume that would be going into Montreal. We would want to compute a fair return on any pipe line to Montreal and then net back to the wellhead of the remainder on the basis of Gulf Coast prices that have today established the worldwide pricing for crude.

MR. PATTILLO: I understand by that, then, that you would be prepared to have the price at Montreal fluctuating in accordance with fluctuations of Gulf and Venezuelan crude?

MR. GALLAGHER: I did not include Venezuelan crude, Mr. Pattillo. To date our price in Canada, as far as I understand, has been based on Gulf Coast price and reflected by transportation or reduced by transportation.

MR. PATTILLO: Would you be quite prepared to continue that basis?

MR. GALLAGHER: I would.

MR. PATTILLO: In addition to being prepared to enter into contracts as you have expressed, would your company be prepared to take any share interest in any proposed new pipe line company?

MR. GALLAGHER: We would be very happy to look at the economics of it and participate if possible.

MR. PATTILLO: What about the other companies? What are their views on this matter?

MR. GALVIN: Speaking for Medallion, we are producers, we are not in the position of transportation or refining. We do have to have a place to put our oil. As a producer we would support those measures which sold our oil products?

MR. PATTILLO: Would you be prepared to enter into long-term contracts for the Montreal market?

MR. GALVIN: Could you define what you mean by long-term?

MR. PATTILLO: Well, some of the people have said that one of the dangers of taking the oil from Montreal is that over the next number of years, during the lifetime that would be required to pay off the investment of the pipe line, markets which are going to be more desirable from the financial point of view are going to become available or may become available and that it would be a mistake in their judgment to tie up Canadian production for the Montreal market so it could not take advantage of the better markets. Now, I am inquiring as to whether you are prepared to tie up your production for the Montreal market for a considerable period of time.

MR. GALVIN: If that question is to be answered yes or no, then we would say no.

MR. PATTILLO: Now, what about Amurex Oil?

MR. VANSANT: A qualified yes.

MR. PATTILLO: What about Bayley Selburne?

MR. FRILEY: I believe the first item in our conclusions fairly well sets out our view on that matter. In other words, we want this thing approached from the highest Government levels first and if we are not successful there then we look at the immediate consideration of a most practical means of commencing movement of the Western Canadian crude to the Montreal market.

By that specifically I mean we would want more facts and figures on this situation. We definitely feel that the Montreal market has its possibilities if the economics were set out, so we have to go along with a qualified yes.

MR. PATTILLO: What about Banff Oil?

MR. HAHOG: Our company produces 90 per cent of its oil in Alberta and is at present producing 40 per cent of its MPR and in any pipe line to Montreal we are going to be behind Saskatchewan, as we are now, in the sale of oil in the province so we would hope some would be left over for us to make a long-term contract with Montreal, which we would do.

MR. PATTILLO: Canadian Export Gas:

Are they in the oil business too?

MR. BECK: Just barely, about 1200 barrels of oil a day and I do not think we are entitled to say on that basis. It is my reaction there are too many nebulous and imponderable factors for me to tell you yes or no, or any sensible answer. I have gone through this landlocked oil business, embargo, or whatever you want to call it, before and I do not think it is anything new or different and I think we eventually worked our way out of the thing. I think it is a question of weighing what you are willing to risk in locking up twenty years' supply of your oil for the pipe line. In my opinion, I cannot say it is a company opinion, I think it is not desirable and we would not.

MR. PATTILLO: Thank you very much.

Now, Canadian Husky, what is your feeling on it?

MR. POWELL: Actually I am not prepared to speak for the company on that and discuss that problem. We have refineries here; we also have refineries back in the States which have no actual connection with the Canadian company. I think it would have to be discussed, but I would say this, we certainly share responsibility with the other companies in the long-term commitment. I feel like the rest of the members here. We would like to explore all other markets before we

went into the Montreal market. Right at the present time, though, it does not appear that there is any market in the very near future.

MR. PATTILLO: Are you really putting it this way, the Montreal market if necessary but not necessarily the Montreal market?

MR. POWELL: I will put it this way: I feel that the only market we have for our crude is the Canadian market. We do not necessarily feel that the Montreal market is the most economical market -- we do not believe it is. The Pacific Northwest market is the most economical and we would like to try to have the opportunity to get into those markets before we attempt the Montreal market.

MR. PATTILLO: Thank you. Now, what about Great Plains Development Company?

MR. NICHOLS: We are not familiar with the details, Mr. Pattillo, by which the statements have been made which you mentioned, that long-term contracts were necessary to support oil going into Montreal as distinguished from supporting it going into Toronto or Vancouver. Therefore, I do not feel that Great Plains is prepared to say until we know whether we are agreed with the need for such long-term contracts.

To put it another way, I am afraid it is a question that I would need to be prepared to

answer yes or no to it, but would not be afraid to answer yes or no after I had had more time to think about it. As far as setting a Montreal market up as being something distinct from other markets which we are apparently serving to a lesser or greater degree, I have not given that any thought nor has it been given any study as to what makes it separate and distinct. In the other markets we are not faced with long-term contracts and have never been called upon to make any.

MR. PATTILLO: I think Mr. Levy's evidence was that if the producers of foreign crude wanted to continue to control the Montreal market they would have no difficulty in putting their oil in there at a price which Canadian refiners could not -- the Canadian producers could not meet -- and I think it was generally thought that if you were going to take Canadian crude into the Montreal market you would have to have throughput agreements, long-term contracts, from the suppliers so that there would be a stabilization of supply and demand.

Now, what is the view of your group as to your willingness to accept controls which you have not got today, if it became necessary to have controls for the purposes of securing the Montreal market? I mean by that, such

controls as to rate of development, controls as to price, controls as to requirement to ship a certain quantity of your oil to Montreal?

MR. GALLAGHER: Well, Mr. Pattillo, we recognize at least on behalf of Dome -- we recognize that there will be some protection necessary in order to move into the Montreal area. We do not feel that that protection or Government control, as you put it, has to move back to the wellhead. Certainly, as to the rate of development, that would still be an economic factor determined by the companies.

As you are aware, the Trans Mountain pipe line was built by a group of producers, all of whom undertook a contingent liability on their balance sheets, that if the Trans Mountain lost money they were liable for part of it and I think a line into Montreal could be built on the same basis whereby each of the producers could be offered an opportunity to participate in that line and also participate in the contingent liability that goes with that. Therefore, there is no control, as I see, reflected back by the Government, no need for control reflected back to the wellhead.

MR. PATTILLO: Well, do you think that if measures were taken to ensure the Montreal market for Canadian crude that if there were

no protective measures taken prices would not go up? The producers, once they had the market and were assured of it, and knew no foreign crude could go in anywhere in Canada, would not increase their prices?

MR. GALLAGHER: By prices do you mean the price to the consumer or back to the wellhead?

MR. PATTILLO: I mean the original wellhead price to the refiner -- it would be passed on to the consumer. If you were given a choice by the Government, by Government measures, that only Canadian crude could be used in the Canadian refineries, do you think that unless controls were taken over price that the price would not go up?

MR. GALLAGHER: Mr. Pattillo, speaking again on behalf of Dome, I feel that we as part of an international industry would still have our wellhead price determined by Gulf Coast price less transportation. Therefore, I feel that the Government or whoever established the protection in Montreal could also see that that interplay of net-back to the wellhead remained intact. I am only speaking on behalf of one company; the others are all available.

MR. PATTILLO: Perhaps during the lunch hour you might ask them as to their respective views and you could state the views of the group, so I will not have to ask each one in turn. Those

are all the questions I have, Mr. Chairman.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: In the short time left before lunch I would like to just get the MPR's and the selling rates of these companies. Amurex, what would be your total MPR and what are you selling?

MR. VANSANT: About 1800 gallons per day and selling 1200.

MR. FRAWLEY: Selling 1200?

MR. VANSANT: Yes.

MR. FRAWLEY: What about Bayley Selburne?

MR. FRILEY: About 6,000 barrels a day, selling 2,000.

MR. FRAWLEY: Banff?

MR. HAHOG: About 900, selling 450.

MR. FRAWLEY: Canadian Export?

MR. BECK: About 2,000 and selling 1,200. That would be gross.

MR. FRAWLEY: Husky?

MR. POWELL: About 6,500 barrels and selling about 2,600 or 2,800.

MR. FRAWLEY: Canadian Superior?

MR. FELDMEYER: About 18,000 -- 16,000 to 18,000 -- and selling about 1[illegible],500.

MR. FRAWLEY: Dome Exploration?

MR. GALLAGHER: MPR, 7,000, approximately; selling approximately 4,000.

MR. FRAWLEY: Great Plains?

MR. NICHOLS: The mathematics with regard to how to arrive at the MPR I do not know but we are currently selling 2,400 barrels a day and the MPR, the current allowables, are around that, around 40 per cent of the potential.

MR. FRAWLEY: Medallion?

MR. GALVIN: 1,800 MPR, 800 barrels per day.

MR. FRAWLEY: I would like to address a few questions to Mr. Beck.

You have put it, Mr. Beck, to Mr. Pattillo that you cannot see the wisdom of locking up your oil for twenty years in a pipeline to Montreal. Is that a fair statement of what you said?

MR. BECK: Yes, because I didn't know what factor would be involved for twenty years.

MR. FRAWLEY: Let me put it to you, Mr. Beck: are you very encouraged with the situation in the United States today? When I say that, I mean the possibility of getting more oil into the United States today.

MR. BECK: Mr. Frawley, I don't think I am qualified to answer that one. There are too many things that are happening in the States for me to know. I am just worrying about what is happening in Canada and so far as I can find some gas and oil to sell, and the position now as I see it, I don't know whether it is encouraging or discouraging.

MR. FRAWLEY: I just want to canvas the situation, Mr. Beck, as well as you knew it. Let me put this to you: is it fair to say that you are certainly not happy with the present situation?

MR. BECK: Yes, that is right.

MR. FRAWLEY: And there seem to be two

alternatives: either we go to the United States or we go to Montreal. I am just wondering if you are encouraged in the matter of going to the United States?

MR. BECK: When? In twenty years or during twenty years?

MR. FRAWLEY: No, now. After all, a decision has to be made now, has it not, Mr. Beck?

MR. BECK: Well, I guess. The point is that, as far as I can see, we have worked our way into these United States markets before; we have never had, as yet, in the last ten years any surplus of oil, and it is just starting to become apparent now. Well, that has happened before, and my thinking would be that the commitment we would be embarking on in the Montreal line would be much more difficult to forecast, whereas down the road we have worked into the Stateside market. I don't think that will happen tomorrow, because they are having their problems and they are cutting back further than we are, so you are asking me to tell you what the demand will be in the States, and I don't know. But certainly as of today, and for a very short time, I would say at least we can't expect to get into the Stateside market because they are being pro rated much more than we are.

MR. FRAWLEY: Do you mean you are not getting in there in the way you think perhaps you

should get in?

MR. BECK: In the way I would like to get in.

MR. FRAWLEY: And I am wondering how long you think you or your company is prepared to wait and accept the present situation and wait to see how things develop in the matter of the United States market.

MR. BECK: Mr. Frawley, as the brief points out, we are not necessarily prepared to wait; we think we should explore the alternatives, as Mr. Gallagher pointed out, in the brief, very emphatically and very deeply. But first we should explore those honestly and as intensely as we can, and then if, in the last resort, we are not able to do anything (maybe it will take six months, twelve months, two years) then we will have to explore this matter of the Montreal pipeline. I am not excluding the Montreal market, I think it is one Canada should have, but I think it is more economic to work it on an exchange basis.

MR. FRAWLEY: Speaking of the exchange basis, I am just wondering, Mr. Beck, how much in barrels that would mean by way of relief to the shut-back oil we have to contend with in Alberta today. What do you visualize in improvement in barrels per day that would mean to the shut-back production?

MR. BECK: Well, you are getting a little over my head. The point, as I understand it, is that there are roughly 300,000 barrels in Montreal.

MR. FRAWLEY: You visualize we could get it by way of exchange replacement of the oil going into Montreal now.

MR. BECK: I said that would be a good hope.

MR. FRAWLEY: If you could get that, we would be going to Montreal just in another way.

MR. BECK: Yes. Of course, that way would involve a 20-year commitment.

MR. FRAWLEY: Now, I think that the gentleman representing -- oh, Bayley Selburne is probably the -- no, Canadian Superior is the biggest and probably has the biggest market. Mr. Feldmeyer, the fact that you are here supporting what Mr. Gallagher said this morning, I take it that your parent company is not opposing what Mr. Gallagher said.

MR. FELDMEYER: No, I don't think we are.

MR. FRAWLEY: I think we can take it that you are here with the knowledge and consent of the parent company supporting his submission.

MR. FELDMEYER: Yes.

MR. FRAWLEY: Are you feeling encouraged with the way we are getting or not getting into the United States market at the present time?

MR. FELDMEYER: I think I would have to say I am not encouraged by it.

MR. FRAWLEY: How long would you be prepared to wait to get into that United States market?

MR. FELDMEYER: No longer than I have to.

---Whereupon the hearing adjourned at 12.25 p.m. until 2.00 p.m.

---On resuming at 2.00 p.m.

THE CHAIRMAN: Gentlemen, I hope you all had a very good lunch. The Commission will now resume its hearings. Mr. Frawley?

MR. FRAWLEY: Thank you, Mr. Chairman. I think I will content myself with directing a few questions to Bayley Selburne and perhaps letting it go at that. Mr. Friley, what are you in Bayley Selburne?

MR. FRILEY: Vice President in charge of exploration.

MR. FRAWLEY: And you have MPR's now totalling 6,000 barrels per day and you are selling about 4,200?

MR. FRILEY: That is correct.

MR. FRAWLEY: That is not a very satisfactory situation?

MR. FRILEY: We would be happier to be selling more per day.

MR. FRAWLEY: Do you think that if you were required to remain in just that situation for an indefinite period that it would be a bad thing forthe oil industry?

MR. FRILEY: We think it would be a bad thing for Bayley Selburne and the oil industry.

MR. FRAWLEY: Would you go a little further and indicate that by being bad for Bayley Selburne it probably is bad for the whole Alberta industry?

MR. FRILEY: We are looking forward to the day when this situation is much better than it is right now, sir.

MR. FRAWLEY: That is right, and you are very much concerned with bettering that situation?

MR. FRILEY: We are quite concerned about it, sir.

MR. FRAWLEY: You support the brief where it says that if the markets in Eastern Canada were entirely served by Canadian crude oil these events, that is the situation, the revolution in Venezuela -- I think you would not have to worry about that -- and some other things that you mention on that page, would cause less concern and on that basis the possibility of a pipeline to the Montreal market merits serious consideration. You support that statement?

MR. FRILEY: We support that.

MR. FRAWLEY: And if, to get to Montreal, you have to execute throughput agreements, would you be completely deterred from going to Montreal merely because you had to sign throughput agreements?

MR. FRILEY: I am not sure that I understand what you mean by "throughput agreements".

MR. FRAWLEY: An agreement with the refiner telling him that you will supply him with his requirements up to a certain point, over a certain period of time.

MR. FRILEY: Mr. Frawley, we would look at that situation. As I mentioned previously, we would want to explore all of these other avenues, then if those other avenues did not work out, it is my feeling that we would be ready to look at a very minimum, or whatever the minimum requirement was in the way of, let us say, blocks or tariff to permit us to economically get that oil into the Montreal market. We do not like the idea of -- I am speaking of Bayley Selburne -- of a lot of controls.

MR. FRAWLEY: Correct.

MR. FRILEY: I do not like that, but we would go for the very minimum controls as are necessary.

MR. FRAWLEY: Well now, Mr. Friley, I do not want us to be at odds. I am not suggesting that you should take any less for your crude oil than you are taking now under the practice which pays you Gulf Coast at Sarnia. Now on that basis, and assuming that that could and would continue and assuming that you had a tariff rate that was a good deal lower than any rate that has appeared in any interprovincial tariff, at least that I have seen, with those sort of conditions would you then -- with those two important conditions: a reasonable pipeline rate and a wellhead price as good as you are now getting, would the fact that you would have to commit your crude to the refiner to enable him to carry on

his operation, would that factor alone make you change your mind and say I don't want to go to Montreal?

MR. FRILEY: Mr. Frawley, that is a rather difficult question for me to answer. We want to sell our oil but we want to make sure that we have all of the facts at hand before we do that. I am not sure at this time that we have all the facts at hand that are necessary. I would say this, that we would be inclined to lean in whatever direction was necessary to get this oil in there so long as the very minimum controls were placed on it.

MR. FRAWLEY: Thank you very much, Mr. Friley.

THE CHAIRMAN: You mean you would not want to lean at all if there were any controls?

MR. FRILEY: Sir, I feel that we always have controls against us. We would analyse the controls just to make sure they were not too great.

MR. COMMISSIONER BRITNELL: Mr. Gallagher, did I understand you to say that you and the group associated with you propose or recommend an immediate embargo on the further importation of any refined petroleum products that are presently produced in Canada?

MR. GALLAGHER: No sir, I didn't make the statement or state "embargo".

MR. COMMISSIONER BRITNELL: I don't think you used the word.

MR. GALLAGHER: The word we use was:

"We recommend that protective steps be taken to
"stop the movement of refined petroleum products
"into Canada where these products or comparable
"products are being manufactured in Canada".

MR. COMMISSIONER BRITNELL: That is, it might be an increase in the tariff as against an embargo, the protective steps?

MR. GALLAGHER: We feel we are not in a position to recommend how that should be accomplished. We think it should be stopped.

MR. COMMISSIONER BRITNELL: Let me put it another way: what protective step have you in mind?

MR. GALLAGHER: I am not in a position to speak on behalf of the group as to whether they favour tariff or embargo, but I would say one or the other.

MR. COMMISSIONER BRITNELL: Pretty well have to be one or the other wouldn't it?

MR. GALLAGHER: Definitely, yes.

MR. COMMISSIONER BRITNELL: And more likely an embargo since a tariff you never are quite sure where you are in the fluctuating world of oil.

MR. GALLAGHER: Yes.

MR. COMMISSIONER BRITNELL: Do I understand

further that you would recommend this step without reference to any independent or your other proposals concerning (a) vigorous representations to Washington looking to the expansion of the United States market for Canadian crude; and (b) reservation of the Montreal market to Canada?

MR. GALLAGHER: Yes sir, I feel that where we have or can create refinery capacity in Canada, that any area within range of our current pipelines should certainly be supplied by products produced from Canadian crude in those particular areas.

MR. COMMISSIONER BRITNELL: Thank you.

MR. COMMISSIONER HARDY: Mr. Gallagher, I wonder if you could tell me approximately to what extent the independents, I do not mean just your own group, but independents in general, are participating in the expansion of exploration activities in the far north, in the Mackenzie bases for example?

MR. GALLAGHER: I am not in a position, Dr. Hardy, to give you percentages. I do know that an independent is not in a position to wait very long for his return on his money. The far north certainly to Dome looks like a long wait and certainly looks like something that other people will have to develop the markets for that oil. Therefore, there are some independents that we know of have gone in there along with the majors, but we

in Dome do not feel that that is a good economic move at this time for a company of Dome's stature.

MR. COMMISSIONER HARDY: So that there are degrees of hazards pretty obviously then in the exploration business?

MR. GALLAGHER: Yes, sir.

MR. COMMISSIONER HARDY: Much greater risk involved in working in some areas than in others?

MR. GALLAGHER: There is a risk involved in exploration anywhere. The greater risk in the far north, as you know, is even after you find something can you sell it, or is there enough of it there to get it out, or build a pipeline. For that reason, the independent is taking the chance that the majors along with him will find sufficient to build a pipeline.

MR. COMMISSIONER HARDY: One other question. Do you consider that there is much difference in the risk in wild-catting as compared to bidding on crown lease sales?

MR. GALLAGHER: Oh, definitely. Of course there are phases of wild-catting from out drilling that may be only a mile removed from current production, to outright rank wild-catting, but there is very little risk if you properly appraise the reservoir conditions, the geology of the particular field you are intending to purchase,

your property, and also to properly appraise the present worth of that oil if you are intending to buy. So that the risk in purchasing is certainly limited.

MR. COMMISSIONER HARDY: Perhaps I am not putting my question quite correctly. That is pretty obviously correct, what you say, but financial-wise do you figure that one system is better as compared to the other?

MR. GALLAGHER: I would like to put it that independents as a group are usually good explorers for oil because the investor in putting his money into an independent is looking for a doubling or trebling of the value of that stock; whereas, he certainly has a limited chance of doing so if he is just buying proven production or semi-proven production. Does that answer your question, Dr. Hardy?

MR. COMMISSIONER HARDY: Yes, I know that we had one large company state exactly the same position the other day. I am having a little trouble finding out who these people are that buy these crown leases. Thank you very much.

MR. GALLAGHER: I would like to answer that by saying that most independents in order to stay in business cannot trust to the luck factor enough to feel he is going to find enough oil to stay in business so he has to buy some and use that

income in order to explore.

MR. COMMISSIONER HOWLAND: I have one question, Mr. Gallagher. You obviously have given quite a lot of thought to this problem of exporting gas. Did you come across any consciousness of the problem of upgrading gas in Alberta before exporting?

MR. GALLAGHER: By "upgrading gas" do you mean increasing the BTU's of that gas?

MR. COMMISSIONER HOWLAND: No, I was thinking more in terms of manufacturing into chemicals or some other form than exporting. I am conscious of the fact that there is some difficulty in doing that because of the United States tariff.

MR. GALLAGHER: Could I ask Mr. Galvin to answer that question for you? He is much more expert on that.

MR. GALVIN: Well, by higher use, we would expect that you would mean the conversion of natural gas into petrochemical products. We would assume that the petrochemical industry as a user of gas required very little for relatively large yield, and our thinking was the supplies in Alberta seemed very much more than adequate, when you relate them to the possible area of higher use. Again, there may be large quantities of truly exportable gas well over and above any imaginable higher use areas.

MR. COMMISSIONER HOWLAND: Well, you would agree, would you or would you not, that the Commission, in considering the matter of the export of gas, might take into account this aspect of exports that in principle the utmost wealth to Canada comes from processing your materials or upgrading them rather than exporting the raw. As I gather from you, the volume of your export of gas as such, to you is very important; you would, on the other hand, agree that there is some principle involved here?

MR. GALVIN: Well, there certainly is. We always have interest in upgrading our materials and getting greater prices and higher use; the

higher use in the matter of domestic fuels and cooking services, and so forth, rather than areas which must be satisfied and we must use our resources, if they are available, in limited quantities but we feel that in Canada the domestic requirements, the petrochemical requirements, the high uses of requirements in general are more than adequately satisfied and there is a vast score of material available for normal use. In that I would put industrial because industrial use is a second level of gas value and also industrial use in turn generates these other uses. There is no conflict here because we do have large and sufficient supplies of gas for all requirements.

MR. COMMISSIONER HOWLAND: Thank you very much.

THE CHAIRMAN: Well, gentlemen, thank you very much, indeed. This is the second occasion on which you have appeared before us and we appreciate very much your help in presenting the brief and the supplementary information you have given us today. We have a very serious and difficult problem and I am sure the testimony you have given us here today has assisted us immensely.

MR. GALLAGHER: Could I take this opportunity of answering the question put to us by Mr. Pattillo before the recess?

THE CHAIRMAN: Certainly.

MR. GALLAGHER: As you observed in previous testimony, we do not have unanimity in our group, at least in respect to the cross-examination. I would like, as spokesman, to state that we all definitely favour Canadian crude moving into the Montreal area after a reasonable, and I underline short time period, has been given to the Montreal refiners to develop a comparable and long-term market. We are all in agreement on that point. Five of our group representing the majority of the group are prepared to commit to long-term contracts if these are proven absolutely necessary and we are also prepared to accept whatever minimum controls are proven to be absolutely essential. The remainder of our group wish to reserve their decision on controls and long-term contracts until it is proven that any controls are necessary. Does that answer your question, Mr. Pattillo?

MR. PATTILLO: Yes, thank you.

THE CHAIRMAN: Before you leave that, the first part of that statement I am not sure I understand, a reasonable time and a short time is given to the Montreal refiner to find other markets?

MR. GALLAGHER: I would like to put it this way: we, as independents, are certainly not in a position to find markets for the oil, we recognize that that is beyond our control. We would say that the people who would be affected by moving oil

into Montreal are the people who, we feel, would be the groups who would be most anxious to find an alternate market.

THE CHAIRMAN: Alternate market for what, for their foreign crude?

MR. GALLAGHER: No, for an equivalent quantity of Canadian crude comparable to the Montreal market.

THE CHAIRMAN: Oh, I see, you are really talking about an exchange?

MR. GALLAGHER: Yes.

THE CHAIRMAN: I am sorry, I did not understand that.

MR. GALLAGHER: Could I go on to the second point?

THE CHAIRMAN: Yes.

MR. GALLAGHER: We were asked by Mr.Pattillo what efforts we had made to sell our oil and I would like to mention that perhaps we left the wrong impression that we have been sitting back and waiting. That is not the case. Under the present prorationing system, we are not, as a group of independents, in a position to go out and sell oil; any oil that we do sell would have to be spread throughout the entire industry or any contracts that we might make, in effect we would only be able to take care of 5% or 10% of it. It is not that we are not willing to go out and do our share, it is just that under the

present prorationing system we are not in a position to do so.

THE CHAIRMAN: There is no incentive?

MR. GALLAGHER: No true incentive and you just cannot make those same contracts.

MR. FRAWLEY: May I just take that up, please?

THE CHAIRMAN: I thought you might, Mr. Frawley.

MR. FRAWLEY: You say if you went out and you found another market you could only participate in that market to the extent that the prorationing scheme allows you to?

MR. GALLAGHER: That is right.

MR. FRAWLEY: Is Imperial Oil not in the same position?

MR. GALLAGHER: Exactly.

MR. FRAWLEY: So if they are going out, I do not know whether they are or not, but if they are going out to find a market here and there, they are doing that for others in the whole group?

MR. GALLAGHER: That is right.

MR. FRAWLEY: So you as a group, and I think you belittle yourselves too much, if you went out and found a market you would be doing just what Imperial Oil is doing?

MR. GALLAGHER: That is right.

THE CHAIRMAN: That is the sunshade we

have been hearing about.

MR. FRAWLEY: You can remember the Sun Oil Company.

MR. GALLAGHER: Imperial is doing a wonderful job and we are all appreciative of the job that the majors have done. All we are saying is without the affiliations in the United States and elsewhere, we are not in a position to effect this interchange in the same way that the International Oil Company is.

THE CHAIRMAN: Of course that is true.

MR. FRAWLEY: Just so no one will think I have forgotten them for a moment, B-A is doing the same good work.

THE CHAIRMAN: Why not throw in all six and be done with them?

MR. FRAWLEY: You could have been trying a little.

MR. GALLAGHER: We did, sir.

THE CHAIRMAN: Thank you very much, gentlemen.

Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. We are now coming to the joint brief that was submitted by Mobil Oil and Pan American Corporation. This brief is a most interesting and informative document on both the Pembina field and the secondary recovery methods adopted by these companies in that field. I am not proposing that it be read but I am

asking that it be marked as CC-15-3.

---EXHIBIT NO. CC-15-3: Joint brief of Mobil Oil and Pan American.

MR. PATTILLO: Now I have explained to both Mobil Oil and Pan American that we do not propose to have the brief read because I think it is most helpful but it does not bear on the problem we have been considering these last few days. I have asked them both to come here today and I thought we would call them forward individually. Mobil Oil has submitted a written statement which I am asking to be marked as CC-15-4 and I would ask the officers of Mobil Oil to come forward.

---EXHIBIT NO. CC-15-4: Written statement submitted by Mobil Oil.

Submission of

MOBIL OIL OF CANADA, LTD.

APPEARANCES:

Mr. A. O. Detmar - President and General Manager

MR. DETMAR: Mr. Chairman, I would like very much to read this statement.

THE CHAIRMAN: Please do.

MR. DETMAR: Mobil Oil of Canada, Ltd., a wholly owned subsidiary of Socony Mobil Oil Company, Inc., commenced operations in Canada in 1942 in Prince Edward Island under the name of The Island Development Company.

Mobil Oil is the successor company to The Island Development Company, and its early operations in Western Canada were carried on under the name of Socony Vacuum Exploration Company and Socony Vacuum Oil Co. of Canada, Ltd. Since August 1, 1955, it has carried on under its present name of Mobil Oil of Canada, Ltd.

The head office of the company is located in the City of Calgary, Alberta. The Directors of the company as presently constituted are:

A. O. Detmar - President and General Manager

L. C. Stevens - Vice President

B. E. Taylor - Vice President

Joseph Spivak

W. K. Brewster

All the Directors are full-time employees of the company and reside in Calgary.

From three employees in 1942, Mobil Oil has grown to 888 employees located in fourteen communities throughout Western Canada. Ninety-eight per cent of our employees are Canadians.

Since 1942 the company has drilled 366 wildcat wells and 1,037 development wells. Thirty-nine of these wildcats discovered oil, the first in 1950 found a small Devonian reef field at Duhamel in Central Alberta. Significant discoveries have since been made both in Saskatchewan and Alberta. In 1953, the company discovered Pembina, Canada's largest oil field.

Incidental to our oil exploration we have discovered 31 gas areas. Twenty-eight of these areas are still undeveloped and shut-in awaiting gas markets.

At present, as Operator of a number of joint interest properties in addition to our wholly owned properties, we produce approximately 48,000 barrels of oil per day from a total of 997 wells. In 1957 Mobil Oil's share of this production averaged approximately 26,200 barrels per day from 530 net wells. Mobil Oil's net potential productive capacity is estimated to be 45,000 barrels per day.

During the sixteen years of our operation our investment in mineral rights, exploration and

development drilling has resulted in average success in establishing production. However, the total revenue derived from this production to-date represents approximately one-third of our total investment.

THE CHAIRMAN: Mr. Pattillo?

MR. PATTILLO: Mr. Detmar, your company is solely in the producing business and is not in any other branch of the business; is that right?

MR. DETMAR: That is correct.

MR. PATTILLO: The parent company has a refinery at the Puget Sound area operated under the name of General Petroleums?

MR. DETMAR: General Petroleum Corporation. I would rather say that than have it confused with the Calgary company.

MR. PATTILLO: And that refinery has a capacity of 35,000 barrels?

MR. DETMAR: Yes, sir.

MR. PATTILLO: In addition to that refinery, where else does your parent company have refineries which are located reasonably close to the Trans Mountain pipe line or the Interprovincial pipe line?

MR. DETMAR: We have a refinery at East St. Louis, at East Chicago, which has a capacity of 38,000 barrels per day. Socony Mobil also has a refinery at Trenton, Michigan, which has a capacity of 29,500 barrels per day.

MR. FRAWLEY: Did you pass over the one at East St. Louis?

MR. DETMAR: I didn't think it was enough to be significant.

MR. PATTILLO: East Chicago and Trenton -- where is Trenton in relation to Detroit?

MR. DETMAR: Just on the southern outskirts, more or less, of the City of Detroit.

MR. PATTILLO: In addition to those three refineries which you have mentioned, are there any more? Is there one any very near San Francisco Bay?

MR. DETMAR: No. The only one in California is near San Pedro, south of Los Angeles. There is one at Torrance, California, with a capacity of 125,000 barrels per day.

MR. PATTILLO: Now, for a while I think the refinery at Puget Sound was taking quite a bit of Canadian oil; is that correct?

MR. DETMAR: Yes, sir, that is correct.

MR. PATTILLO: What amount is it taking today?

MR. DETMAR: Today it is taking 11,500 barrels of Alberta crude.

MR. PATTILLO: And how does that compare with what it has taken in the past?

MR. DETMAR: Would you mind if I give you a little background on the position at the refinery?

MR. PATTILLO: Please.

MR. DETMAR: The General Petroleum Corporation, one of the subsidiaries of Socony

Mobil pioneered the refinery development in the Puget Sound area by opening Ferndale refinery in the fall of 1954. The plant was designed to handle light, high-gravity, low-sulphur content crude, such as was then being produced in several fields in Alberta. On June 11th, 1953, approximately seventeen months before the refinery went on stream, a crude oil purchase contract for a minimum of 15,000 and a maximum of 20,000 barrels per day of Alberta crude was negotiated with McColl-Frontenac.

Later, in 1955, when the refinery was in operation, a second agreement for 11,500 barrels per day of light Alberta crude was negotiated, this time with Imperial Oil.

The General Petroleum refinery at Ferndale has taken an average of approximately 24,000 barrels a day of Alberta crude since it went on stream in 1954. That is with the exception of the current months of ---

MR. PATTILLO: The current month of May this year?

MR. DETMAR: No, I believe their take in April of this year was something like 17,500, and in May it is down to 11,500.

MR. PATTILLO: Can you give us any advices as to whether this drop down in take is due to the refinery falling off in its capacity

or whether there is a substitution of crude?

MR. DETMAR: It is a combination of factors, Mr. Pattillo. The basic problem is the falling off of demand for crude oil, and that has been caused by the general business recession, the cutbacks in take that the military see fit to take these days on the West Coast, and the effect of the competition of Canadian natural gas going into the Northwest, and General Petroleum's effort to distribute the burden of this diminishing market.

MR. PATTILLO: What are the other sources of crude the company is using in its Ferndale operation?

MR. DETMAR: It is using some Californian crude, and, incidentally, prior to its recent cutback of Alberta crude, it shut-in 6100 barrels of General Petroleum Corporation's California production and reduced its long-term purchase contracts by 10 per cent across the board before reducing its take of Alberta crude. In addition to the 11,500 barrels of Alberta crude, it has 6,000 barrels of Officino crude from Venezuela and 4,000 barrels of California crude.

MR. PATTILLO: Have you been able to find out what the officials of your parent company think of the future prospects of stepping up their requirements of Canadian crude?

MR. DETMAR: Yes, Mr. Pattillo. They are hopeful that they can step up the amount of Alberta crude that can be taken at Ferndale.

MR. PATTILLO: It isn't a question of price that is affecting it?

MR. DETMAR: No, sir, it is not a question of price.

MR. PATTILLO: What about the other refineries? Do you know whether your parent company has given any consideration at all to the taking of Canadian crude into either one of these refineries?

MR. DETMAR: I think in line with our discussion on the Midwest situation it might be of benefit for me to go through the story of our part in the Great Northern Oil Company's refinery at Pine Bend, Minnesota.

In 1951, Mobil Oil negotiated a farmout agreement in Saskatchewan from the predecessor companies to Woodley Canadian Oil Company and Sinclair Canada Oil Company. While performing the exploration and drilling obligations of this farmout agreement, Mobil Oil discovered the Fosterton oil field in 1952. It was the first of several medium gravity oil fields discovered on the farmout properties. Considering the nature of the crude, and the fact that the reserves discovered were far in excess of local

requirements, the development of a suitable outlet for this crude posed a very difficult problem.

The Commission will recall the testimony of Mr. Marlin Sandlin, President of Woodley Canadian Oil Company, presented at the Regina hearings. He described the development of an outlet for this oil. It consisted of three principal projects. The first was a 156-mile, 16-inch pipe line from the Fosterton oil field to the Interprovincial Pipe Line terminal at Regina. The second was a pipe line from the Interprovincial Pipe Line at Clearbrook, Minnesota, to Pine Bend, Minnesota, near St. Paul, and, lastly, a refinery at Pine Bend designed to handle the Fosterton type crude.

Mobil Oil of Canada, Limited, provided fifty per cent of the equity capital in the South Saskatchewan Pipe Line; signed a minimum throughput guarantee; and supplied the technical staff to design and supervise its construction.

The "Mobil" companies have no financial or operating interest in the Minnesota Pipeline Company, and I think that was clearly brought out at Regina by Mr. Sandlin. We did, however, make an important commitment which assisted materially in the financing and construction of the Great Northern refinery at Pine Bend. Socony Mobil made a firm guarantee to purchase a substantial

quantity in barrels per day of products refined by Great Northern from Canadian crude oil.

During the first four months of 1958 Socony Mobil purchased an average of 18,000 barrels per day of refined products from this refinery.

MR. PATTILLO: Mr. Detmar, what is your company's view as to pro rationing in Alberta, having regard to the geographical situation of the province and the markets that are presently available to it? Do you think that pro rationing is a desirable thing?

MR. DETMAR: Personally, I think that there are two sides to it, like there is to every question. We have tried to analyse it. Certainly it would be able to refute the claim that it does make strong effort in finding additional large markets somewhat less than it probably should be because of the sharing required, but I think that the benefits have not always been brought out too strongly, the benefits to the smaller companies; and I shouldn't say smaller companies, I should rather say non-refining companies. Through pro rationing the non-refiners are assured of a portion of the market. I think that it adds stability to not only crude oil prices and petroleum product prices but to the economy of our province as well in general.

MR. PATTILLO: Thank you, Mr. Detmar.

I don't think I have any other questions, Mr. Chairman.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: Mr. Detmar, in this province the pools are, by and large, multiple-owned; isn't that so?

MR. DETMAR: Yes, sir.

MR. FRAWLEY: Well, now, with that sort of diversified ownership, isn't pro rationing to market demand almost a necessity?

MR. DETMAR: It certainly does protect -- offset drainage.

MR. FRAWLEY: If you had a pool which was owned half by, say, Mobil and half by one of the companies we have seen, the so-called independents, and we had no pro rationing, it was removed entirely, Mobil would find a place for its half of the pool, but would that not do what you have just intimated it might do, immediately create the problem of drainage of the other fellows' oil?

MR. DETMAR: It could very well.

MR. FRAWLEY: And, of course, could it not also, following on from that, set up some difficulties? If you had one-half of the pool not being sold at all -- that would have to be my assumption -- and the other half of the pool being fully produced and sold, would you not get yourself in the same reservoir difficulty there?

MR. DETMAR: That would have to be determined by an appropriate Board.

MR. FRAWLEY: Yes, the Conservation Board, but could you see the Conservation Board limiting itself to fixing allowables with nothing to do with pro rationing and not setting up at least the serious possibility of creating loss of reservoir energy?

MR. DETMAR: It is very probable that some type of pipe line pro rationing would have to be instituted.

MR. FRAWLEY: Now, Mr. Detmar, you feel that the situation in the Puget Sound represents at least the practices which your company has followed in substantially reducing its nominations. That has resulted from good sound business practices on the part of your company?

MR. DETMAR: We believe it has.

MR. PATTILLO: Having in mind the other interests that it has in other parts of the United States and other parts of the world, indeed?

MR. DETMAR: I am looking after the interests of Mobil Oil of Canada.

MR. FRAWLEY: Yes, that is true, but you have ventured to justify, I might say rather reasonably well, the situation of General Petroleum of Ferndale and just thinking of that I put it to you that what was done at Ferndale is just what you would expect from a company having in mind these diversified interests. You would agree with that?

MR. DETMAR: To a certain degree.

MR. FRAWLEY: And do you not think the Alberta producer is faced with that kind of decision, perfectly proper decisions from the standpoint of that Ferndale company? Do you not think the Alberta producer has to just accept that?

MR. DETMAR: I don't know in what light you use the words "has to accept it".

MR. FRAWLEY: He has to live with that?

MR. DETMAR: He has to live with it.

MR. FRAWLEY: That is right. Without being facetious either live or die with it. Now there is only one other thing I want to mention. Socony has a subsidiary in Venezuela producing oil?

MR. DETMAR: That is correct.

MR. FRAWLEY: And they are now selling some of that oil into the Montreal market?

MR. DETMAR: That is correct.

MR. FRAWLEY: At least to the extent of the exchange that is made between Imperial and General.

Imperial buys a certain quantity of Venezuelan crude, or the Socony affiliate and the Socony affiliate buys a certain amount of Alberta crude from Imperial?

MR. DETMAR: That is right.

MR. FRAWLEY: I suppose it would not be unfair to say that by virtue of that Socony at least is interested in maintaining the status quo in the Montreal market?

MR. DETMAR: No sir, I would not say that. That is not correct.

MR. FRAWLEY: You do not think that. Is that the only oil that they are selling into Montreal?

MR. DETMAR: That is correct.

MR. FRAWLEY: So you would say that that infinitesimal quantity of oil would not justify a policy on the part of Socony?

MR. DETMAR: That would not be the deciding factor.

MR. FRAWLEY: Thank you very much.

THE CHAIRMAN: Mr. Detmar, what is your view with respect to the Pine Bend outlet from Saskatchewan to that heavy, medium heavy crude, medium crude? By prior questioning in the testimony given to us at Regina by Mr. Sandlin, he was very concerned about the continuation of that importation in view of the import restrictions, and he felt it would be decided by August, I think was his view.

I got the impression, I think we all did, that he felt it was rather touch and go. Mr. White, the other day here when I asked him, said that it would no doubt continue. It would just have to. It was a special case, and so on. What is your view of that?

MR. DETMAR: We certainly hope that the present quota will not be reduced. Our people are making every effort to impress on the United States Government that import quotas should be removed or kept to a minimum as much as possible. I have a very clear-cut statement of our company's policy here as an excerpt from a speech, if I might read it?

THE CHAIRMAN: Certainly. Your company would be very definitely in favour of that importation?

MR. DETMAR: Yes, they would. I would like to read a portion of a speech, a talk that was given by the president of Socony Mobil Oil Company Incorporated, Mr. Albert L. Nickerson before the Independent Oil Men's Association of New England, Boston, Massachusetts on April 15, of this year. In referring to the import quotas he says:

"The plan is basically fair and reasonable. However, I do believe that the level of imports has now been cut as deeply as this country can afford. The importation of petroleum, as I suggested earlier,

is only one of the several factors which have been affecting domestic production of oil, and not the major factor. Cutting them still further would be of no great help to domestic producers, unless imports were virtually eliminated. Further cuts would be harmful to the interests of Americans as a whole.

Any further nibbling away at the import quotas would have the immediate effect of further damaging the relationships of this country with some of its important friends and allies, who count on entering a share of their oil production in competition in the American market. Already we have seen how the restrictions have eroded the traditional good-will toward the United States in two Western Hemisphere countries, Venezuela and Canada, from which come about 57 percent of our crude oil imports. While it is possible that supplies of oil from South America could be substantially affected by enemy action in the event of open warfare, at least in its early stages, it seems a curious argument that oil from a well in Saskatchewan is a less secure source in an emergency than oil from another well directly across the border in Montana. Our Canadian neighbors, with whom we are inextricably linked in such important defense efforts as NATO and the DEW line, are already more conscious of our import restrictions than most Americans. In

order to buy from us, they have to sell to us. And, incidentally, since we in the United States export more than we import, we stand to lose more than we gain whenever we limit imports. In any case, Canadians would certainly take any further cut in the oil-import quotas as an unfriendly act."

THE CHAIRMAN: Thank you very much, Mr. Detmar.

MR. COMMISSIONER HARDY: I have just one question, Mr. Detmar. I am not clear from your brief here, I have not had time to go through it in detail, whether you also take part in bidding on crown lease sales, or do you confine your operations to wild-catting?

MR. DETMAR: No sir, we buy the odd proven tract.

MR. COMMISSIONER HARDY: Dollarwise perhaps it is a small percentage of your total operation?

MR. DETMAR: Yes, it is not a major part of our investment.

MR. COMMISSIONER HARDY: You would look at that as just more or less what risk the company would want to attach to the money you spend?

MR. DETMAR: That is correct.

MR. FRAWLEY: Mr. Chairman, might I ask Mr. Detmar one question arising out of what Mr. Hardy has asked?

THE CHAIRMAN: Certainly.

MR. FRAWLEY: In your statement I was quite interested in this remark:

"Since 1942 the company has drilled 366 wild-
"cat wells, and 1,037 development wells.
"39 of these wild-cats discovered oil."

Are those your Canadian operations?

MR. DETMAR: Yes, sir. This does not deal with anything but our Canadian operations.

MR. FRAWLEY: Andout of the 366 wild-cats that you drilled you got oil in 39 of them?

MR. DETMAR: That is correct.

MR. FRAWLEY: About 11 per cent. That just indicates that this industry needs a lot of incentive?

MR. DETMAR: Yes, it does.

MR. FRAWLEY: Having 65 per cent of your oil shutback is certainly, you would agree with me, about the antithesis of an incentive?

MR. DETMAR: Yes, sir.

MR. COMMISSIONER HOWLAND: Isn't that a rather good batting average?

MR. DETMAR: There are quite a large number of success ratio measurements that are used. We think it isaverage.

THE CHAIRMAN: Average or a little above average?

MR. DETMAR: I think you have to go back to the quality of each one of those oil discoveries

before you judge.

THE CHAIRMAN: The ramifications in this industry are tremendous. Well, thank you very much, Mr. Detmar, for your submission and for this very excellent treatise really on the production and conservation in the Pembina field. We are very happy to have that although we did not ask you to read it into the record today. And also thank you for answering questions and coming here. We appreciate that very much.

MR. DETMAR: Thank you.

Submission of

THE PAN AMERICAN PETROLEUM CORPORATION

APPEARANCES:

Mr. George Galloway	-	Canadian Division Manager
Mr.Kirkpatrick	-	Crude Oil Control Manager of the Standard Oil of Indiana in Chicago

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MR. PATTILLO: Mr. Chairman, I would like now to have the Pan American Petroleum Corporation officials come forward.

THE CHAIRMAN: They have had the benefit of a ringside seat all day.

MR. FRAWLEY: All week.

MR. GALLOWAY: I would like to introduce ourselves. My name is George Galloway. I am the Canadian Division Manager for Pan American. Mr. Pattillo told me that we might anticipate some questions that would get outside the scope of the purely producing operation. We have a representative of the Standard Oil in Indiana over here on my left, Mr. Kirkpatrick. Mr. Kirkpatrick is Crude Oil Control Manager of the Standard Oil of Indiana in Chicago and anything I can't answer I will try and get him to help with. We have no prepared submission. Mr. Pattillo, we understood that you wanted to ask some questions?

MR. PATTILLO: That is quite correct, Mr. Galloway. Could you tell me how many acres you

have under reservation or licence in the Province of Alberta?

MR. GALLOWAY: In Alberta about 8 million, Mr. Pattillo.

MR. PATTILLO: And Saskatchewan?

MR. GALLOWAY: About 2 million.

MR. PATTILLO: Are you in Manitoba and British Columbia also?

MR. PATTILLO: We are rather large in British Columbia, about 3 million and scarcely at all in Manitoba.

MR. PATTILLO: What is your acreage under lease in Canada?

MR. GALLOWAY: Mr. Pattillo, the total I gave you includes acres in all categories.

MR. PATTILLO: Right. Now, how many oil wells have you?

MR. GALLOWAY: We operate about 450 oil wells.

MR. PATTILLO: And what is your aggregate MPR?

MR. GALLOWAY: About 13,000 barrels per day.

MR. PATTILLO: And at the present time what quantity are you producing and selling?

MR. GALLOWAY: Roughly 8,000.

MR. PATTILLO: Now, your company is a subsidiary of the Standard of Indiana?

MR. GALLOWAY: That is right.

MR. PATTILLO: And it carries on, as I understand it, the producing end of the business, whereas Standard of Indiana carries on the refining and marketing, is that correct?

MR. GALLOWAY: That is correct.

MR. PATTILLO: How long have you been operating in Canada?

MR. GALLOWAY: Since 1948.

MR. PATTILLO: Since 1948 up to the present time have you sold any crude from Canada to the Standard of Indiana or any of your affiliate companies?

MR. GALLOWAY: Not directly.

MR. PATTILLO: Have you sold any by way of exchange?

MR. GALLOWAY: I think that is entirely likely, Mr. Pattillo, since we do a great deal of trade with other companies in the United States where we are the largest crude oil purchaser.

MR. PATTILLO: Now, would you, Mr. Kirkpatrick, tell us where the refineries of Standard of Indiana are?

MR. KIRKPATRICK: Yes, in Whiting, Indiana, which is at the base of Lake Michigan near Chicago. We have a refinery near Kansas City, Missouri; we have a refinery at Wood River, Illinois, across the river from St. Louis. We have a smaller refinery at Mandan, North Dakota; one at Neodesha, Kansas, and one at Whiting. Those are the six refineries of the parent company Standard of Indiana.

MR. PATTILLO: Now, the one in North Dakota has passed full capacity of what?

MR. KIRKPATRICK: Approximately 35,000 barrels a day.

MR. PATTILLO: Approximately how far is that situate from the Interprovincial pipe line?

MR. KIRKPATRICK: I would have to guess at that and I would say between 150 and 200 miles.

MR. PATTILLO: And what is the source of crude that it is presently using in that refinery?

MR. KIRKPATRICK: That is all North Dakota crude.

MR. PATTILLO: Would that crude be wholly-owned Standard crude?

MR. KIRKPATRICK: No, sir, we own a very small portion of it, unfortunately.

MR. PATTILLO: Have you done any calculations to see whether or not Canadian crude coming through the Interprovincial and cutting off to your refinery there could be put into competition or what the differential would have to be to make it competitive, what the drop would have to be on the present prices?

MR. KIRKPATRICK: We have not given thought, any serious thought to that because of the crude right in North Dakota and being shut-in all the time, as they drill more wells. Of course, we are not increasing the capacity of the refinery so the allowable is going down and down.

MR. PATTILLO: What is the situation in North Dakota as compared to the situation in Alberta? Can you tell us, do they operate pro rationing there?

MR. KIRKPATRICK: Yes, sir.

MR. PATTILLO: And do you know what their economical allowable is, the average as compared to their MPR?

MR. KIRKPATRICK: No, sir, I do not have that figure with me.

MR. PATTILLO: Well, now, what about the refinery in Whiting, near Chicago? What is its capacity?

MR. KIRKPATRICK: It has a capacity of

215,000 barrels a day.

MR. PATTILLO: And what source of crude is it using?

MR. KIRKPATRICK: It uses crude from eight different states, the bulk of which -- I should not say the bulk, but there is 44 per cent from the State of Texas, 25 per cent from Wyoming, 16 per cent from Kansas, 10 per cent from Oklahoma, 5 per cent each from Montana and Nebraska, 4 per cent from Colorado and one per cent from New Mexico.

MR. PATTILLO: Is any of that crude Standard-owned crude?

MR. KIRKPATRICK: Yes, sir.

MR. PATTILLO: About what proportion?

MR. KIRKPATRICK: I would say just in the neighbourhood of 50 per cent.

MR. PATTILLO: Now, have you ever figured out the competitive situation of Canadian crude at Whiting compared to the crude you are presently using there?

MR. KIRKPATRICK: Yes, sir, we have.

MR. PATTILLO: Can you give us some information regarding that?

MR. KIRKPATRICK: Our composite crude scheme, the laid-down cost of that to Whiting last year was $3.35 per barrel. We are presently putting into forecasting the figure of $3.28 per

barrel for the year 1959. It is on a slight downward trend. We have calculated that the Canadian crude, taking Pembina as an example, with present facilities of Interprovincial to the Head of the Lakes and by tanker to Chicago would cost us $3.89 per barrel. We have calculated further, a hypothetical case of building a take-off line from Interprovincial to Chicago which certainly is not a likely case but we have looked at it and figured that crude might lay down for about $3.44 per barrel, so there is still quite a discrepancy.

MR. PATTILLO: Did you by any chance hear or read in the Canadian papers about an application that has just been made to the Board of Transport for a pipe line running from Edmonton to Chicago?

MR. KIRKPATRICK: Yes, sir, I did.

MR. PATTILLO: Had you heard anything about that prior to reading about it in the paper?

MR. KIRKPATRICK: No, sir, that was the first word.

MR. PATTILLO: Your company has not signed up a throughput agreement in that line?

MR. KIRKPATRICK: No.

MR. PATTILLO: You have not heard anything in Chicago,amongst any of the refineries there,about such a line?

MR. KIRKPATRICK: No, sir. I had a call two days ago from the Chicago Tribune; they had a call about it and wanted to know what we knew about it and that was the first I had heard.

THE CHAIRMAN: We are all in the same boat.

MR. PATTILLO: When you made these calculations that you have just given us, how much did you figure it would cost you oil per barrel from Superior to Chicago by tanker?

MR. KIRKPATRICK: We used a figure of 35 cents per barrel for the tanker haul, 6 cents for terminal and loading; I believe that is the standard charge at the Lakehead pipe line. We had a one-cent unloading charge at the other end and because of the closed navigation five months of the year on the lakes we had to figure on a storage charge representing the capital charge on the extra tanker requirement, a storage charge of 25 cents a barrel.

MR. PATTILLO: And when you were figuring on that pipe line tieing into the Interprovincial line, how much did you figure it was going to cost to cut in on that from the Interprovincial line to Chicago?

MR. KIRKPATRICK: We broke that down -- of course, we have the present gathering charges

and pipe line allowances established by tariffs. We figured 37 cents as a trunk line charge in Canada and 18 cents for the United States portion. That was a charge designed to return a 7 per cent figure on the investment.

MR. PATTILLO: Now, if it could be arranged that Canadian crude could be put into Chicago at an equivalent price laid down to the price you estimate is going to be your composite price for next year, would your company be prepared to take any portion of Canadian crude?

MR. KIRKPATRICK: Well, I would say that we would certainly take a serious look at such a thing. I am not prepared to make any commitment.

MR. PATTILLO: No, but you are not turning it down flatly and saying that you will not do it?

MR. KIRKPATRICK: No, we would give it consideration.

MR. PATTILLO: Now, are you in a position at all to assist this situation in Alberta by way of exchange with any of the companies?

MR. KIRKPATRICK: Well, we feel we are doing that already in the manner in which our present Canadian production is being marketed. As far as going further I am not sure what you might have in mind in the way of exchanges but I would say

we would certainly be open minded on the subject and willing to consider anything that was reasonable.

MR. PATTILLO: Would you explain how your present Canadian production is being marketed that you think you are in fact doing something by way of exchange?

MR. KIRKPATRICK: Well, my only thought was that the way we are selling the crude directly to Imperial Oil Company, I believe that is correct, and we buy in the United States from other affiliated companies of the Jersey group in other States so we scratch their back and they scratch ours.

MR. PATTILLO: If we could only get a few more people scratching the same way perhaps we could do better.

Those are all the questions I have, Mr. Chairman.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: Mr. Kirkpatrick, you now have MPR's in Alberta of 13,000 barrels a day; I think that is what was said?

MR. KIRKPATRICK: I will take your word for it.

MR. FRAWLEY: And I am sure Mr. Galloway will get some more oil for you up here?

MR. KIRKPATRICK: We hope he will.

MR. FRAWLEY: It is fair to assume if

you can get some of this oil into your American refineries you would like to have that, would you not?

MR. KIRKPATRICK: If it is economically feasible.

MR. FRAWLEY: Exactly. Now, looking at the last of your representations, we can rule some of them out right away. Kansas City is not very practical?

MR. KIRKPATRICK: No, sir.

MR. FRAWLEY: And Wood River?

MR. KIRKPATRICK: No.

MR. FRAWLEY: And the other one in Kansas?

MR. KIRKPATRICK: Neodesha, it is in the central part, it is out.

MR. FRAWLEY: And Caspar, Wyoming; it is not practical?

MR. KIRKPATRICK: No, sir.

MR. FRAWLEY: I would think there is the one at Whiting and the one in North Dakota, would you agree that of all of those you listed those might be the two worth thinking a little bit about?

MR. KIRKPATRICK: Well, I cannot see that Mandan, even though it geographically is a little closer than Kansas or Missouri could come into it.

MR. FRAWLEY: I would like to demonstrate

to you how impossible it is going to be. Do you know anything about the economy of North Dakota?

MR. KIRKPATRICK: In what respect?

MR. FRAWLEY: Well, it produces a lot of lignite coal?

MR. KIRKPATRICK: Yes.

MR. FRAWLEY: So they do in Saskatchewan. Do you know what the North Dakota lignite people feel about the lignite in Saskatchewan?

MR. KIRKPATRICK: I could guess.

MR. FRAWLEY: I put it to you that with the picture of surpluses of production in North Dakota, if you ever tried to get Saskatchewan crude into that refinery in North Dakota you would have to have shotguns to do it?

MR. KIRKPATRICK: That is a very good assumption.

MR. FRAWLEY: So, with the best will in the world I am afraid Mr, Galloway's parent company is not going to do anything about making a deal for Alberta crude?

MR. KIRKPATRICK: I do not believe we are so situated, anyway.

MR. COMMISSIONER HARDY: Mr. Kirkpatrick, I was quite interested in your figures on costs of delivering the crude to Chicago and as I worked out the arithmetic it looks to me that with the proposed pipe line then you are only 16 cents out

of the ball park; is that right?

MR. KIRKPATRICK: On those figures, that is correct, yes, sir.

MR. COMMISSIONER HARDY: Where is this take-off from Interprovincial?

MR. KIRKPATRICK: I think they move it at Clarebrook, Minnesota.

MR. COMMISSIONER HARDY: Well, from the evidence we have had given us here this week, what advantage is to be derived from transportation by large pipe lines? It would look to me that with a little bigger pipe line you could make Alberta crude competitive in Chicago as well as in the East. You have 37 cents for transportation over Interprovincial which is roughly half the cost to Toronto. It is now 72 cents to Toronto. Just by straight proportion on some of the figures that have been given us to Toronto with the big pipe line at 52 cents, by proportioning it it comes out pretty close.

MR. KIRKPATRICK: Well, sometimes you have to be a little careful on the pipe line figures in proportioning them. They are rather tricky.

MR. COMMISSIONER HARDY: You get mixed up with the rate formula?

MR. KIRKPATRICK: Yes, sir.

MR. COMMISSIONER HARDY: Well, suppose that we can show, somebody can show that on the basis of pure economics that we are talking about you could lay down the oil in Chicago then at a competitive price, to what extent do you think that company considerations would limit the delivery of oil to Chicago?

MR. KIRKPATRICK: Well, I think there are other factors besides just the economics. You have to look at the import controls which they have in effect now. I don't think there is any reason to feel that there would be any sudden changes in those; and on top of that, even though your bare economics may look all right, you are headed for an area which is swimming in oil itself, $2\frac{1}{2}$ million barrels a day of reserve producing capacity,and from the figures we have looked at, we can't see any improvement in that situation, oh, in the next five or ten years, possibly, and you would assume, then, that the United States producers were going to sit still and let a traditional market be taken from them, their pipe-line, of course, into the Chicago area and their fields they have been servicing for thirty or forty years -- I just don't think it is realistic to look as far south as Chicago as a possible market for Canadian crude.

MR. COMMISSIONER HARDY: You don't think that a 32 inch or 40 inch pipe would take the Montreal

market as well as the Chicago market?

MR. KIRKPATRICK: I wouldn't care to comment on that.

THE CHAIRMAN: Thank you very much, Mr. Galloway and Mr. Kirkpatrick. We appreciate your coming and giving this testimony and answering the questions to assist the Commission.

MR. KIRKPATRICK: You are very welcome, sir.

THE CHAIRMAN: Thank you very much.

---A short recess.

THE CHAIRMAN: The Commission will now resume its hearing. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. Mr. Chairman, I would like to ask Mr. Brown of Home Oil if he would come forward. I want to question him about some matters that have come up since they were on the stand and on which they expressed no opinion. This is not going to be by way of rebuttal to the presentation of the other companies but merely to get his views on matters that have arisen.

THE CHAIRMAN: Yes. Mr. Brown?

MR. PATTILLO: Now, Mr. Brown, we have had a good deal of discussion about prorationing in Alberta to market demand. What do you have to say as to prorationing to market demand as carried out

in the Province of Alberta today?

MR. BROWN: Our company, being interested only in production, very much favours prorationing as practised in Alberta today. All of the wells that we own are offset. If we did not have prorationing in its present form, we would be unable to market our oil and the offset wells would drain oil from our property.

MR. PATTILLO: Now, what has your company done to endeavour to find markets other than the markets that are presently being supplied.

MR. BROWN: I think, sir, the whole background of our submission deals with that problem. We had Mr. Levy prepare a study for us on the possible future markets for Alberta oil, and we followed that by having an engineering study done in connection with the building of a pipeline. That has been our main effort to find markets.

MR. PATTILLO: Having got Mr. Levy's report, were you subsequently in touch with any of the refineries in the Middle West or Puget Sound area to see whether you could them to increase their take of Canadian crude?

MR. BROWN: We had no direct contact with any of the refineries.

MR. PATTILLO: Now, would you care to express any views as to what you consider is the responsibility of a pipeline company in seeking

markets?

MR. BROWN: We feel, as I think Mr.Levy expressed during his visit to the Commission, that the pipeline company has a responsibility to seek markets as a matter of good business for the pipeline in expanding its business.

MR. PATTILLO: Now, you heard all of the refiners in the Montreal area, all of whom have an interest in the Portland pipeline, saying that if Canadian crude was taken to Montreal it would destroy their investment in that line, and that in figuring the cost to them, that loss would have to be taken into consideration. Now, is there anything you wish to say regarding that, and had you taken that into consideration in proposing going to Montreal with Canadian crude?

MR. BROWN: We did not take it into consideration in speaking of our tariff of 51.8¢. We have had discussion among ourselves with respect to it, and if no further use could be found for the pipeline of any sort, it is a matter that should undoubtedly be considered. My personal opinion, however, is that it is a business loss in that event and should not be taken into account, but the pressures would be considerable that it should be done.

MR. PATTILLO: Now, you have heard a good deal of discussion during these hearings about the

necessity of having some form of control if Canadian crude is going to go to Montreal. What are your views about the application, for instance, of quotas?

MR. BROWN: If I understand your question, Mr. Pattillo, I think it is not a difficult matter for an equivalent of an oil and gas division of the Department of Trade and Commerce to administer quotas both in respect to the Montreal market and the Maritimes. I think these things cannot be firmly set over a long period of time but rather must have some flexibility to meet the conditions as they arise.

MR. PATTILLO: Supposing quotas were imposed, do you think that there would be any necessity for the Government or some arm of the Government to regulate the price of oil?

MR. BROWN: No, sir, I don't think that quotas would have anything to do with the price of oil. We would still maintain our price as at the present time based on Illinois crude delivered into Sarnia, which is entirely even at this side theoretical. In fact, the crude that goes into Sarnia, or Toronto -- the crude comes from Texas, but we would continue to maintain a competitive price based on Gulf Coast or Illinois.

MR. PATTILLO: If no foreign crude were coming into the country and Canadian producers had a monopoly of the Canadian market, wouldn't you

have to have some regulation of price?

MR. BROWN: Not on the assumption that you make, Mr. Pattillo, that we maintain our price as based on U. S. Gulf Coast.

MR. PATTILLO: How do you think that that could be policed if the only people that were supplying the market in Canada were the Canadian producers?

MR. BROWN: The assumption is, I think, that if you did get out of line then crude would start moving from the United States into Canada and it is automatically policed in that manner.

MR. PATTILLO: That could only happen if you permitted the importation of crude from the United States into Canada. Would you be prepared to permit United States crude to come into Montreal, for example, if it were competitive?

MR. BROWN: I would be prepared to do it provided we put an equivalent amount into American orders. In other words, if we could sell 250,000 barrels a day in the Pacific northwest on an assured basis using the existing Trans Mountain facilities, I would be prepared to trade that for 250,000 barrels of American crude into Montreal.

MR. PATTILLO: Have you given any thought to this question of exchange to avoid the cost of building a pipeline to Montreal?

MR. BROWN: We have given thought to it, sir, but we are not really in a position to express an opinion because we are not in the refining business and there is nothing that we could add to what has been said by the major oil companies.

MR. PATTILLO: Now let me ask you a few questions about this proposed pipeline. Who do you contemplate would be the persons to participate in the formation and financing of this pipeline?

MR. BROWN: Firstly, sir, I think that the producers and the refiners in this country should be the principal shareholders. I think there should be some emphasis placed on the amount of stock which would be owned within Canada. In other words, there should also be public participation in such a pipeline.

MR. PATTILLO: Now, what is your view on a pipeline? Some of the companies referred to it as being a facility of the refining company. Do you agree with that?

MR. BROWN: It is a facility for both the producer and refiner, sir.

MR. PATTILLO: Have you given any thought, you have heard all of these Montreal refiners say that they would not voluntarily sign a throughput agreement, have you given any thought as to how you could finance this pipeline if you had no throughput agreements?

MR. BROWN: I think it would be impossible to finance a pipeline without throughput agreements. The only alternative would be some form of government guarantee.

MR. PATTILLO: Have you give any thought

to the problem that would be facing you and other independent producers of agreeing to enter into long-term contracts to supply oil?

MR. BROWN: I think the question is pretty well theoretical, Mr. Pattillo, but to answer it directly: from our point of view we would be prepared to enter into long-term contracts.

MR. PATTILLO: What would your views be about the Government of Canada instituting controls over the oil industry to the point of regulating the price?

MR. BROWN: We would be very much opposed to government regulating prices. The oil industry as presently constituted is on a broad global basis, and I think if you tamper, or if the government tampers artificially with prices we would end up in serious trouble.

MR. PATTILLO: Do you think there would be any danger of us ending up in serious trouble if the government tampered with the natural law of economics as to the supply of markets, and said that Canadian crude should be used in the Canadian markets exclusively?

MR. BROWN: Provided Canadian crude can enter the market on a competitive basis, sir, I think that I would be hopeful that the government would decide that we could serve the Canadian markets but at no burden to the consumer in the market

concerned.

MR. PATTILLO: My difficulty Mr. Brown is this: Mr. Levy told us that it would be very easy for the foreign producer, if he wanted to do so, to undersell Canadian crude in Toronto and certainly no problem at all at Montreal. Now, if that is so, how can Canadian crude be competitive with a situation such as that unless there are some artificial measures put in to remove the danger of foreign crude coming in?

MR. BROWN: I think Mr. Pattillo the foreign crude has been in a position that it could do exactly what you say for the past several years and it has not yet happened. I would doubt very much if the Montreal market is important enough on a global basis, taking into account the oil potential of the Middle East and Venezuela, to change the price structure for the total quantity of crude involved.

MR. PATTILLO: What are your views as to the Canadian Government making every effort to make some arrangement with the United States so there would be, as Mr. Levy called it, a hemisphere policy regarding the marketing of oil before consideration be given to going to Montreal?

MR. BROWN: My personal opinion, sir, is such a discussion could last for many years before anything would be resolved, particularly if you make

it hemispheric. I think it would be difficult even for the Americans and ourselves to work out a policy in less than a few years' time.

MR. PATTILLO: What would you think as to the advisability of the government calling a meeting of the industry to see what might be done immediately to increase the market for Canadian crude?

MR. BROWN: I think such a meeting is a good idea. I would doubt very much how productive it would be. I think in listening to the evidence given before this Commission during the past two weeks, it has been pretty clearly demonstrated why we are not even today fulfilling the available quotas for Canadian crude, for example, in the Pacific northwest.

MR. PATTILLO: That situation there is identical to the situation all over the continent, namely, that there isn't the demand at the moment that was anticipated.

MR. BROWN: That is partly the answer, sir. The other part of the answer is that there has been very heavy imports into the United States West Coast since the first of January so that the problem is one relating to the recession and a reduction in demand. It is also one which has come about as the result of imports in Venezuela and Indonesia.

MR. PATTILLO: Now, what are your views on there being an Energy Board appointed by the

Government of Canada? Do you think there is a need for such a Board?

MR. BROWN: If I may, Mr. Pattillo, it is our intention to make a written submission during the course of the next six weeks to the Borden Commission with respect to that matter.

MR. PATTILLO: I thought we had brought this out, Mr. Brown, but apparently it is not clear. When you are talking about supplying the Montreal market, as I understand it, you envisage that the price being received by the producer would vary in accordance with the variations of prices of Illinois crude laid down at Sarnia?

MR. BROWN: That is correct, sir.

MR. PATTILLO: And that you would be prepared to enter into a long-term supply agreement with the stipulation as to the price in that manner?

MR. BROWN: That is correct. I think it is very important in pricing our crude that we keep on a continental basis as opposed to a world basis. We should continue, in other words, to keep our industry in balance with the American industry.

MR. PATTILLO: What would you do about the importation of products, refined products?

MR. BROWN: The view which I expressed to you earlier on that subject was that we would like to see a ceiling put on the imporation of refined products, and as our Canadian refiners could supplant

any of it, to reduce the amount of product being imported into Canada.

MR. PATTILLO: Now, if you got the present refiners in Montreal to agree, after pressure, to enter into throughput agreements, and you say you can't build a line without such agreements, what would you do to preclude any other refiner coming along and building a refinery at Montreal and importing foreign crude at a cheaper laid-down cost?

MR. BROWN: I think that would be very difficult if you had an import quota, Mr. Pattillo.

MR. PATTILLO: You mean you would put an aggregate import quota on crude which would mean that the refinery couldn't be self-sustained?

MR. BROWN: That is correct, sir.

MR. PATTILLO: Those are all the questions I have, Mr. Chairman.

THE CHAIRMAN: Thank you. Mr. Frawley?

MR. FRAWLEY: No, I have no questions of Mr. Brown.

THE CHAIRMAN: Then I gather, Mr. Brown, that not only would you feel that for a pipeline such as you have envisaged it would be necessary to have throughput agreements, but also quotas?

MR. BROWN: Yes sir. I think a quota is very important. The amount of money involved in going to Montreal is so great that you would be unable to find it unless you were assured -- I think

I answered that question too quickly. If you had throughput agreements, sir, you wouldn't need a quota.

THE CHAIRMAN: Well, wouldn't you? Now, I want to get that straight because that is surely the only control that the country would have with respect to an outside refiner coming in and importing his crude to compete with Canadian crude?

MR. BROWN: That is correct, sir. It would need a quota system, I think.

THE CHAIRMAN: The quota comes first, doesn't it? If you had the quota then except for the technicalities involved in financing, it would accomplish everything that a throughput agreement would accomplish, wouldn't it?

MR. BROWN: It would, sir. There is the one difference: if you have a throughput agreement signed for a long term, the quota could be varied with a new government coming into power so I think the first step would be the quota and out of that would arise the long-term throughput agreement.

THE CHAIRMAN: Yes, I would think you would really have to have both?

MR. BROWN: Yes.

MR. COMMISSIONER BRITNELL: I think perhaps I may have missed a point arising out of one of your first answers to Mr. Pattillo.

Mr. Brown, my question would be:

how could competitive prices of United States crude at Sarnia police the prices in the Montreal market without governmental control if you will not let in United States crude at all unless the United States takes a barrel of Canadian crude somewhere else for every barrel of United States crude you let in at Sarnia?

MR. BROWN: I am not sure that I understand the point you are trying to get at, sir.

MR. COMMISSIONER BRITNELL: Well, the point I have in mind is how you can possibly have the market operate, the competitive features of the market operate at all under a system of embargo or quotas which keeps out United States crude at Sarnia? You talk about the Sarnia market regulating the price in the Montreal market and protecting the consumer, and indeed the refiner from any substantial increase in price. I just don't quite see how the mechanism works.

MR. BROWN: It is actually operating today sir, isn't it?

MR. BRITNELL: Oh, yes.

MR. BROWN: In the Sarnia-Toronto area.

MR. COMMISSIONER BRITNELL: Oh yes, in the Sarnia-Toronto area.

MR. BROWN: I think the fact that there is only 15 or 20,000 barrels of oil going into that area from the United States is really not an important factor in determining the price in that area.

MR. COMMISSIONER BRITNELL: But the quantity is not important as long as there is freedom of access to the market. If the price should get out of line, that freedom of access to the market would be denied under the structure which you suggest, would it not?

MR. BROWN: Yes, but on the other hand, one of the conditions would be that you continue to price your oil on the United States Gulf Coast as is being done today which I think is all the protection one would need to make sure the producers did not suddenly increase the price of oil $1.00 per barrel. It is actually operating that way in the Ontario area at the present time; we are based on Illinois prices, there is no oil going into Canada from Illinois but that is the pricing.

MR. COMMISSIONER BRITNELL: I hope you are right, Mr. Brown.

MR. COMMISSIONER HOWLAND: Still on that point, I am trying to figure out how you can use Sarnia price in the Toronto area to set up the price in Montreal. As I see it now, the price in Montreal is roughly $3.11 and in Toronto $3.38. Now, the $3.38 is based on the Sarnia prices; how are you going to do this, Sarnia cost plus to get to Montreal?

MR. BROWN: No, sir, from our point of view we make no distinction between the Montreal

market and the Toronto-Sarnia market. In our thinking that is a marketing area, in the theory of it, therefore, the refiner can afford to pay the same price in any part of the area. In other words, we represent that we could put oil into Montreal at $3.16 a barrel. That was to establish that it is possible for Canadian oil to be competitive with foreign oil in the Montreal market.

MR. COMMISSIONER HOWLAND: Well, if I understand you correctly, in order to sustain the price level in Montreal under your formula, you would have to absorb 27¢ at the refining level.

MR. BROWN: I do not follow your arithmetic there.

MR. COMMISSIONER HOWLAND: Well, I am just looking at the figures that you have, the price of crude at Toronto is $3.38 and in Montreal it is $3.11. Now, if you are going to base your price, the Sarnia price, and use it as a yardstick in Montreal, the price of crude oil in Montreal is going up to $3.38.

MR. BROWN: In the theory of it that is right. By the way, we do not accept the $3.11 figure as being the price in Montreal. I think one company, British American, indicated their cost in Montreal was $3.24 and we are not sure what the actual laid down cost of crude to the other refiners is because in all cases it was

assumed that a certain rate -- USMC rate -- was used, but we did not determine -- perhaps we missed it during the course of the hearing -- but we did not determine what their actual costs were.

MR. COMMISSIONER HOWLAND: I am actually talking from a cost figure that has been given to me. Let us deal with it in principle; there is a spread there, is there not?

MR. BROWN: Yes, there is.

MR. COMMISSIONER HOWLAND: And I was having difficulty understanding your views. A spread, assume 11¢ or 15¢, the Sarnia basing point seems to me to be a Sarnia plus to get into Montreal so you are going to have to estimate that the refining capacity in Montreal is capable of refining this crude and still retaining the lower level price level or, alternatively, the Montreal price would go up.

MR. BROWN: We have the two different classification systems and in the theory of it I would imagine that the -- if you had a highly efficient transportation system into the Sarnia-Toronto market at the present time, the price of crude, laid down cost, would be less than Montreal. Now, what we have been doing during the course of this hearing is looking at a 72¢ rate and a 52¢ rate.

MR. COMMISSIONER HOWLAND: Well, I am

having a lot of difficulty understanding your formula in the sense that I can understand a Gulf price, but a Sarnia price seems to me to be hard to understand in Montreal.

MR. BROWN: It adds up to the same thing, the Gulf price sets the price here in Alberta.

MR. COMMISSIONER HOWLAND: It just goes around in a circle?

MR. BROWN: Yes, you just go around in the same circle.

MR. COMMISSIONER HOWLAND: Thank you.

THE CHAIRMAN: Well, I do not know whether the Commission wishes to thank you and Home Oil Company or not, Mr. Brown. You certainly have not lessened our problem. Obviously, you and your colleagues and your company have devoted a great deal of time and study and expended a great deal of money in the preparation of material and we are very grateful for the manner in which you and your colleagues have endeavoured to help us with this problem which you have thrown at us. Thank you very much for coming again today.

MR. BROWN: Thank you, sir, and I wish to, on behalf of our group, compliment the Commission on the manner in which the hearings have been conducted in Calgary. I think we have all learned a great deal more about oil than we knew before.

THE CHAIRMAN: Mr. Pattillo, I understand

that is all for today?

MR. PATTILLO: That is right, Mr.Chairman.

THE CHAIRMAN: The Commission will now adjourn to reassemble tomorrow morning at 10 o'clock in this room at which time the Premier of the Province will be present.

---Whereupon the hearing adjourned at 4.10 p.m., until 10 o'clock, Friday morning, May 16, 1958.

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

CALGARY

ALTA.

VOLUME No.: 43

DATE: MAY 16 1958

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ROYAL COMMISSION

ON

ENERGY

Hearings held at Calgary, commencing Tuesday, April 29, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	-- Chairman
Mr. J.L. Levesque	-- Member
Mr. G.E. Britnell	-- Member
Dr. R.D. Howland	-- Member
Mr. L.J. Ladner, Q.C.	-- Member
Dr. R.M. Hardy	-- Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson	-- Secretary to the Commission.
Major N. Lafrance	-- Assistant Secretary to the Commission.

APPEARANCES:

Honourable E. C. Manning, Premier of Manitoba

Dr. G. W. Govier) Mr. D. P. Goodall)	Members of the Conservation Board
Mr. Vernon Millard	Secretary, Conservation Board
Mr. D. R. Craig	Oil Engineer
Mr. J. G. Stabback	Gas Engineer
Mr. R. J. Cooper	Statistician

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Friday,
May 16, 1958.

---On resuming at 10.00 a.m.

---Mr. Commissioner Levesque was not present.

---Mr. Commissioner Ladner was not present.

Submission of

HONOURABLE E. C. MANNING
Premier of Alberta

Appearances:

Honourable E. C. Manning	- Premier of Alberta
Dr. G. W. Govier) Mr. D. P. Goodall)	- Members of the Conservation Board
Mr. Vernon Millard	- Secretary of the Conservation Board
Mr. D. R. Craig	- Oil Engineer
Mr. J. G. Stabback	- Gas Engineer
Mr. R. J. Cooper	- Statistician

THE CHAIRMAN: Gentlemen, the Commission will resume its hearing. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. We have the privilege and honour of hearing the Premier of the Province here today and he has submitted to us two statements which I propose to mark CC-16-1; that is the yellow statement. The

shorter white statement will be CC-16-2.

I think Mr. Frawley, who appears as counsel for the Province, is going to introduce the members of the Board who are with the Premier.

THE CHAIRMAN: I understand, Mr. Pattillo, that Mr. Frawley wishes to make a statement for the record with respect to a matter that was raised at one of our previous sessions?

MR. FRAWLEY: Yes, I do.

THE CHAIRMAN: Do you wish to do that first, Mr. Frawley?

MR. FRAWLEY: Yes, I will. Perhaps I might be permitted, following up Mr. Pattillo's suggestion to us, to introduce the members.

With Premier Manning this morning is Dr. G. W. Govier and Mr. D. P. Goodall, members of the Conservation Board; also Mr. Vernon Millard, Secretary of the Board; Mr. D. R. Craig, Oil Engineer; Mr. J. G. Stabback, Gas Engineer; and Mr. R. J. Cooper, Statistician.

The statement to which you referred, Mr. Chairman, you will recall when Mr. White was giving evidence on the 6th of May you asked him this questions:

"Have you made any calculation as
"to what the additional royalty and bonus
"payment and revenues of that nature would
"be to the provinces in Canada, (I assume

"just Saskatchewan and Alberta would be "involved), in the event of 200,000 barrels "per day of Canadian crude displacing "foreign crude in Montreal?"

You will recall that at your suggestion I said I would endeavour to obtain an answer to that question. This is the answer that has been supplied to me by the Department of Mines and Minerals as to royalty:

"Royalty: Assuming that the suggested "additional 200,000 barrels per day would "be produced by the Provinces of Alberta "and Saskatchewan, in the ratio of the pro- "duction of each province for the year 1957, "then 158,000 barrels per day would be allo- "cated to Alberta. Approximately 70 per "cent of the oil produced in Alberta is "subject to Crown royalty, payable to the "province. This means that about 110,600 "barrels per day or 40,369,000 barrels per "year would be subject to provincial royalty. "If it is assumed that the average wellhead "price would be $2.50 per barrel, the "value of this oil would be $100,922,500. "At an average royalty of 13.5 per cent, "the annual increase in royalty collections "on this production would be $13,625,000.

"Rentals and Bonuses: There would be

"little increase from Alberta Crown lease "rentals and bonuses as these are more "likely to increase as a result of exploration successes, than an increased market. "As a consequence, annual revenue increase "from rentals would not be expected to exceed "more than $2,000,000 and bonus payments "from the acquisition of Crown leases might "be expected to increase by from three to "five million dollars per year."

THE CHAIRMAN: Thank you very much, Mr. Frawley. Mr. Manning?

THE HONOURABLE E. C. MANNING: Mr. Chairman and Commissioners, I appreciate this opportunity to appear before you and to outline the views of the Government of Alberta concerning Canada's oil industry. You have heard from many sources about the present serious imbalance between the productive capability of the industry in Western Canada and the markets available to it. I do not intend to review the details of this situation, as I believe the fact of its existence and its seriousness is agreed to by all. This problem is of particular importance to the Province of Alberta.

As a government we have been concerned over the deteriorating market conditions since mid-1957. In November of that year I advised

the Prime Minister of the problem and since that time I have tried to keep him posted on new developments. As recently as April 12th of this year I reviewed the situation with him and made certain specific proposals. I have followed with great interest the general tenor of the testimony presented to your Commission and I have found that much of it confirms my previous understanding, and all of it emphasizes the seriousness of the difficulties which have developed.

The causes of this marketing problem have been fully treated in several of the briefs presented to you. Some of these causes are of a temporary nature and they will probably be corrected during the next few months. Others, however, are of a more serious and long-term character and consequently require strong efforts by both industry and government for correction. Among the temporary causes are --

1. the economic recession with its concurrent reduction in demand for petroleum products.
2. the warm winter which reduced the demand for heating fuels.
3. excessive inventories arising out of the above two factors and also from events associated with the Suez crisis.

Among the more important and long-term

causes of the problem are --

1. The system of voluntary import quotas instituted by the United States.

   These quotas have had an adverse effect on the markets for Canadian oil since they are less than the volumes imported during the first half of 1957 by those refiners using Canadian crude. In addition the quota system has had an indirect effect since the displacement of foreign crude has led to much more severe competition for the remaining markets. This has meant that Canadian producers have experienced difficulty in retaining markets which previously seemed secure.

   The quota system also is responsible for casting serious doubt on the long-term future role of these United States export markets as major outlets for Canadian crude oil.

2. The pressure from Middle East and Venezuelan crude oil.

   The cost of producing crude oil in these areas is low in comparison to costs in Canada and the United States. Except in the Puget Sound area this pressure has not seriously affected existing

markets. However, it has been responsible for restricting the area in which Canadian production can find new market outlets.

3. The low tanker rates prevailing because of both the availability of surplus capacity and the development of new super tankers.

4. The continued discovery of crude oil reserves in W stern Canada has increased productive capability. On the other hand, during the last few years there has been little accomplished in acquiring new market areas for Canadian production.

Producers in this province have not sold large volumes in any new market since 1954, other than those special sales which occurred during the Suez crisis.

I understand that industry in general agrees that these causes are primarily responsible for the present situation. I also understand that there is general agreement as to the seriousness of this problem. However, there is a difference of opinion as to whether or not these difficulties are of a transitory or permanent nature. The independent company depending primarily on production revenue is well aware that

the present low production rates represent a serious loss of revenue. On the other hand, an integrated company operating in all phases of the industry and through affiliated companies having reserves in various parts of the world is not as seriously affected by regional marketing problems. Such a company can afford to take a much longer-term view and therefore an immediate solution is not as vital to the company's operations. It should be emphasized that the Canadian independents can be very seriously hurt if today's marketing difficulties continue even for a relatively short time.

The Government of Alberta takes a serious view of this whole situation. We agree that some of the causes are temporary and that when they are corrected there will be a small improvement. Without strong and definite action to correct the long-term causes, however, we can foresee only a very serious damage to our provincial and national economy and welfare. Specifically we anticipate --

1. danger to the stability and development of the oil industry, especially among the Canadian companies having limited activities.

2. danger to the stability and development of the many industries related to and serving the oil industry.

These include important industries in all parts of Canada. The effect on employment in Canada is involved in both the above points.

3. a serious loss in revenue at all government levels from municipal through provincial to federal.
This is particularly true of the municipal and federal governments whose tax revenue is dependent on the general level of business activity rather than royalties from production.

4. a continuing adverse effect on Canada's trade balance with United States arising from the loss of some of our export markets.
On the other side of the ledger crude oil imports into Canada in 1956 represented $271,000,000 or approximately 37 per cent of the total unfavourable balance of merchandise trade.

5. a serious danger to Canada's national security resulting from a lessening of activity in the oil industry.

I agree with those spokesmen of industry who have said that only an all-out effort by both industry and government at all levels can achieve a complete solution. Broadly

speaking, this solution must be considered in terms of --

1. expansion in the Canadian markets of
   (a) Ontario, and
   (b) Quebec.
2. expansion in the following export markets of the United States:
   (a) The Pacific northwest region.
   (b) The North Central region including the States of Minnesota, Michigan, Wisconsin and possibly other neighbouring states.

   This expansion constitutes an integral part of the philosophy of continental defense and the interrelationship of Canadian and United States crude oil reserves.

Several companies have proposed the expansion of the Ontario market and some have suggested that every effort should be made to recapture and expand the markets in the Pacific Northwest and the North Central areas of the United States. These companies all seem convinced that something can be accomplished in the Ontario market but they differ in their assessment of the degree of success and in the expansion possibilities in the two export areas. Analyses made for me by the staff of the Oil and Gas Conservation

Board indicate that the expansion in the Ontario market and the reestablishment of export at its former level in the two United States markets (with reasonable growth provision) would bring about a market growth insufficient for an effective solution to the problem. I believe that the eastern two of these three market areas would assure producers in Manitoba and Saskatchewan a continued outlet for their crude oil due to their geographical locations, but the improvement in Alberta would fall far short of what is necessary to meet the situation. I have been advised that with these markets, Alberta producers could look forward to marketing in 1960 only approximately 49 per cent of the oil which could be produced under good engineering practice. I, therefore, conclude that not only from the viewpoint of Alberta but from the consideration of Canada as a whole, these proposals do not go far enough, and expansion of our market either into Quebec or further into the United States or both, is a necessity.

I have given considerable thought to the steps which might be taken, both by government and industry, to assure the acquisition of these necessary new markets.

Having regard to all the factors involved I would urge that your Commission, at the earliest

possible date, advise the Prime Minister and the Cabinet of the serious marketing problem confronting Canada's oil industry and recommend immediate action along the following lines:

1. That the Prime Minister convene a meeting with the senior officials of the refining, importing, transporting and marketing companies involved in order to -

   (a) advise them of the urgent need for increased use of Canadian crude oil and for the reduction of imports of crude oil and also for the freezing of refined product imports to present levels.

   (b) request industry to take all necessary action to accomplish these objectives and also to advise industry that certain specific objectives must be fulfilled in accordance with an established time schedule.

   (c) advise industry that failing a satisfactory solution to this problem within the prescribed time, it is the intention of the Government of Canada to impose import quotas on crude oil and refined products to the extent necessary to make economically feasible the construction and operation of a pipe line to transport Canadian crude oil from Western Canada

to the Montreal refining area.

Some of the testimony given at this hearing has referred to another means of acquiring additional markets. This relates to the possibility of companies, particularly those having operations throughout Canada and the United States, arranging for the inter-change of crude oil between Canadian and United States refineries. This possibility should be explored at the meeting between government and industry called for in this proposal, but it should be made clear that any markets acquired by such an inter-change would have to represent additions which would not otherwise have accrued to Canadian producers.

2. That the Prime Minister request an appropriate government agency to proceed immediately to make a thorough analysis of the best ways and means of instituting import quotas on crude oil and refined products into Canada.

3. That the Prime Minister re-open and continue high level discussions with the United States government with the view of re-establishing and expanding the markets for Canadian produced crude oil in the Pacific North-west and North Central areas of the United States.

Talks with regard to this problem already have taken place but unfortunately little has been accomplished. I still believe that such

negotiations eventually can be successful providing a stronger approach is taken by the Canadian representatives and providing the discussions are conducted at cabinet level. However, we must not anticipate any major adjustments in the next few years.' The Canadian approach to this discussion should emphasize the inter-relationship of all crude oil reserves on this continent, particularly in terms of defense considerations.

4. That the Prime Minister designate a member of his Cabinet to keep in close touch with the industry, the provincial governments and the United States government to insure "follow through" and the most rapid progress possible.

I have purposely refrained from discussing many of the details of the over-all problem considered in this brief, believing that the Commission is interested primarily in the broad principles. I would, however, like to make further reference to the proposal for a pipe line to Montreal. You have heard a good deal of testimony concerning the costs and estimated tariffs for a completely new pipe line, and the costs and estimated tariffs for looping and expanding the system of the present Interprovincial Pipe Line. I believe it is generally agreed that only under a system of either voluntary long term contracts or enforced quotas could Western Canadian crude oil displace foreign

produced oil in the Quebec market. The most economic way of transporting crude oil to Montreal clearly is dependent upon the initial volume and the anticipated future volumes to be moved. This in turn depends directly upon the amount of the voluntary contracts or enforced import quotas and on any reduction or growth in the area served by the Montreal refineries. Moreover, the actual tariffs to be charged by any pipe line will be effected by the manner in which it is financed and by whether or not there will be federal regulation of interprovincial pipe line tariffs. In discussions with the Prime Minister I have previously indicated that the Government of Alberta favors a separate pipe line to Montreal provided the tariff charged would make Alberta crude oil competitive in that market area. We would not be opposed to the looping and extension of an existing line, provided it gave the same result. We have no preference for any individual project other than to emphasize the importance of taking advantage of the economies available through a large diameter pipeline designed specifically to transport Western Canadian crude oil to the Montreal area at the lowest possible cost.

Preliminary studies made by the staff of the Oil and Gas Conservation Board of one project already submitted to your Commission indicates that it is economically feasible to deliver Western

Canadian crude to the Montreal refining area at prices roughly the same as those now being paid in that area for imported crude oil, provided that the volumes permitted under voluntary contracts or an enforced import quota system are sufficient. This approximate equivalence in price in Montreal is the important thing and I do not believe that too much consideration should be given now to the details of calculating the exact price of various crude oil supplies or the cost of alternate transportation methods. The use of Canadian crude in Montreal under these circumstances should not necessitate any increase in price to the consumers in Eastern Canada.

The crux of the situation, it seems to me, is the establishment of necessary restrictions on the importation of crude oil and refined products in the interests of the revitalization and preservation of our oil industry and our national economy. I hope that this can be done voluntarily by industry. In view of the representations made before you by some of the integrated oil companies I believe industry should be given an opportunity to solve the problem. If industry cannot produce a solution that can be applied speedily or if its solution falls short of being adequate the government of Canada must be prepared to take a firm stand. On this basis I see no valid objection or reasonable alternative to

a system of enforced import quotas on both crude oil and refined products. In fact, from a national point of view there is a recognized advantage in processing in Canada the largest possible amount of any indiginous commodity such as crude oil rather than exporting the raw material and importing finished products.

In the interests of its national economy and its national security the United States Government decided to restrict imports by voluntary controls to ensure that the domestic industry would be able to keep exploration and development at a level which would provide adequate supplies for the future. It is significant to note that this action was taken at a time when the United States was producing at 74% of the total productive capacity. This can be compared to the Canadian situation during 1957 when production was restricted to an average of 55% and in December was equal to 45% of productive capacity. In Alberta the situation was even worse in that our comparable rates were 51% and 38% of permissible production. Under these circumstances, which are not going to improve without effective action on the part of industry and government, the importance and urgency of remedial action requires no further elaboration.

THE CHAIRMAN: Thank you very much, Mr. Premier. Do you wish also to read in your Submission with respect to the general functions of a National Energy Board?

MR. MANNING: Thank you, Mr. Chairman. This second very brief submission is carrying out a request we made in which your Commission concurred at the time we made a previous statement on natural gas.

---EXHIBIT NO. CC-16-1: Submission of Hon. E.C. Manning, Premier of Alberta.

---EXHIBIT NO. CC-16-2: Submission of Hon. E.C. Manning, concerning General Functions of a National Energy Board.

MR. MANNING: Mr. Chairman and Commissioners: In a previous submission on April 29, 1958, on the subject of natural gas, I advocated that your Commission should recommend to the Government of Canada the establishment of a National Energy Board with restricted but clearly defined powers with respect to the transmission and marketing of natural gas in the fields of interprovincial and international trade.

I outlined on that occasion what we consider should be the major and specific functions of a National Energy Board in those matters relating to natural gas which come within federal jurisdiction. At the same time I emphasized that a National Energy Board should not be empowered to interfere in any way with matters which rightly come within the legislative jurisdiction of the provinces.

My purpose in filing this present brief is

to outline the broader and more general functions which, in our opinion, a National Energy Board should perform. We respectfully suggest that your Commission recommend that the G vernment of Canada assign to a National Energy Board of recognized stature, the following functions and responsibilities:

1. The conduct of a continuous survey of the energy resources of the nation having regard to:
   (a) The nature and extent of such resources.
   (b) The extent of their development and utilization.
   (c) Development trends.
   (d) National energy requirements as established by present consumption and trends.
2. The gathering, co-ordinating, classifying and maintaining of up to date statistical data with respect to the matters enumerated above, such data to be made available to governments and industry as a guide in planning energy development and/or requirements.
3. The function of acting as an Advisory Board to the Government of Canada on matters concerning the development, transportation, efficient utilization and export of energy resources to the extent such matters are subject to federal jurisdiction.

THE CHAIRMAN: Thank you very much, Mr. Premier. On behalf of the Commission I wish to express a very deep gratitude to you and to your officials and

the staff of the Oil and Gas Conservation Board for the co-operation which you have given the Commission, for the submission which you made to us when we met first in Calgary in February, for your submission which you gave to us on the 29th of April and the two submissions today. We all appreciate that you stand ready, willing and able to subject yourself to what has been variously described at different times as questioning, examination or cross-examination by counsel or the Commission itself. We, however, do not intend to subject you to such questioning or examination. We do not think it is the function of a Royal Commission to subject the head of government in a province to questioning with respect to policies of his administration in that province. We are taking this course because we realize fully, as you have so often expressed it to us and we have had tangible evidence of it of your desire to co-operate and to give the Commission the full benefit of the knowledge and experience of the provincial authorities and officials with respect to matters referred to in the terms of reference to the Commission. Consequently, as we have an opportunity to consider the submissions which you have made to us today we will count on being able to get in touch with you and your officials for further elucidation and information with respect to the various matters with which you

have dealt. I hope that course will be satisfactory to you.

HON. MR. MANNING: Thank you, Mr. Chairman. I do want to assure you that we are anxious and ready at any time because of the tremendous importance that we attach to the subjects that you have in your study and their bearing on the economy and welfare of this part of Canada especially. We are anxious and willing at any time either by additional verbal testimony or by filing additional material with the Commission to clarify or enlarge on any of the material that we have submitted or provide any additional material that you feel may be in any way helpful in the studies you are making. We certainly hope you will call on us if we can be of assistance in that regard.

THE CHAIRMAN: We know you can be of assistance and I think you can count on it that we will count on you from time to time and your officials. Thank you very much indeed.

Now, gentlemen, this concludes the hearings of the Royal Commission on Energy Resources in Calgary at this time and on behalf of the Commission and the staff of the Commission I wish to express our gratitude to Mr. Manning, to the Provincial authorities, to the people of Alberta and of Calgary for their kind hospitality during the period that we have been here. I also wish to express our gratitude as a

ROYAL COMMISSION ON ENERGY

Date:

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Commission to those who have appeared before us and given testimony either written or oral. These people have gone to a great deal of expense and a great deal of inconvenience but it is a cause which I am sure they realize as we do that is very much worthwhile. We appreciate the help and assistance which we have received and I can assure you we approach our task of trying to sort out this tangled skein with humility but with knowledge that there are many in this country who are willing to give us the information which is necessary and all the help and assistance which they feel we require and I can assure you we require a great deal. Thank you very much.

We will adjourn the sittings of the Royal Commission and meet again in Winnipeg on May 21st following which we will meet in Toronto on the 2nd day of July.

---Whereupon the hearing adjourned at 10.30 a.m. until Wednesday, May 21, 1958, in Winnipeg.

CANADA

ROYAL COMMISSION ON ENERGY

Chairman
HENRY BORDEN, C.M.G., Q.C.

Commissioners
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GORDON G. CUSHING
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ROBERT D. HOWLAND
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ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

WINNIPEG

MAN.

VOLUME No.: 44

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ROYAL COMMISSION

ON

ENERGY

Hearings held at Winnipeg, commencing Wednesday, May 21, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	-- Chairman
Mr. J.L. Levesque	-- Member
Mr. G.E. Britnell	-- Member
Dr. R.D. Howland	-- Member
Mr. L.J. Ladner, Q.C.	-- Member
Dr. R.M. Hardy	-- Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson	-- Secretary to the Commission.
Major N. Lafrance	-- Assistant Secretary to the Commission.

APPEARANCES:

Representing The Government of the Province of Manitoba.

Mr. J. Cowan - Deputy Minister of Mines and Natural Resources

Mr. R.W. Keyes - Assistant to the General Manager, Manitoba Hydro-Electric Board

Mr. R. Moffat - Counsel.

EXHIBITS

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APPEARANCES:

Representing Trans-Prairie Pipelines Ltd.

Mr. Don R. Brandt	-	President
Mr. D.J. McDonald	-	Director
Mr. R.G.B. Dickson	-	Director and Vice-President
Mr. J. Blair	-	Counsel

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Wednesday,
May 21, 1958.

---On resuming at 10.00 a.m.

---The Chairman was not present.

---Mr. Commissioner Ladner was not present.

---Mr. Commissioner Levesque in the chair.

THE CHAIRMAN: Mr. Premier and ladies and gentlemen:

This is the first of the public hearings which the Royal Commission on Energy expects to hold in the Province of Manitoba. May I begin by expressing the regrets of our Chairman, Mr. Henry Borden, at his inability to be present at these hearings. Mr. Borden was looking forward to being in Winnipeg but unhappily he developed a back ailment some weeks ago and had to return to Toronto for a hospital check-up at the conclusion of our hearings in Calgary last week. He was kind enough to suggest that I should substitute for him as Chairman of these meetings.

We are glad to be in Manitoba and pleased indeed to have the Premier of the Province honour us with his presence this morning.

I should mention that we have just concluded three crowded weeks of public hearings in Calgary, the centre of the oil and gas industry of

the Province of Alberta. I need hardly say that, because of the great importance of natural gas and petroleum to the economy of Alberta, our discussions of the marketing problems affecting these two important resources were lengthy and indeed controversial. I recognize that the emphasis in Manitoba is bound to be somewhat different. As I understand it, your Province -- while it is rich in hydro electric resources and possesses an expanding oil potential -- is nevertheless defecient in some of the other sources of energy and looks at the question of energy from the viewpoint of a consumer. For that reason the representations that will be made to us here are especially important. We need to look at these questions from all sides and to remember that the consumer viewpoint is of equal importance to that of the producing areas. Above all, the Commission is anxious to obtain all the facts and opinions relevant to a proper energy policy for Canada, in so far as the Federal Government has jurisdiction in this field.

As I said a moment ago, we are grateful for the kindness of the Premier of the Province in attending this morning, and for the hospitality which has been shown to us. I am sure that before commencing with the first submission, which is being presented by the Province of Manitoba, all of us would like to have a word from the Premier.

Premier Campbell?

MR. CAMPBELL: Mr. Acting Chairman and members of the Commission: I am very happy indeed to appear this morning to welcome the Commission officially to the Province of Manitoba and to its hearings here, and to say how important we feel the work of the Commission to be.

Anything that we in the Province can do to make your stay more useful and enjoyable will certainly be done. I am sure that all the people of Manitoba share the regret of the Commission members that Mr. Borden is unable to be with us this morning, and particularly because his absence is caused by illness. I hope that he will have a speedy recovery. I understand Mr. Ladner also has been indisposed, but we are glad to see that so many of you are in apparent good health, and we do welcome you to the Province of Manitoba.

Just a year ago now our university had the pleasure of conferring an honorary degree on Dr. Hardy, and it was a very popular appointment, and we are glad to have him as an alumnus of our university.

I must apologize for the fact I will not be able to spend as much time at the hearings today as I otherwise would, and before members of the Commission or anyone else present jump to the conclusion that it is in connection with something that is

happening in less than four weeks' time, I should mention that the reason for my absence is because convocation of the university is being held today, and, having had a very large number of my children graduate from this university, I like to keep my connection with their convocation.

Mr. Chairman, the Province of Manitoba having recognized what an important Commission this one is, and how its final report on the findings and recommendations will influence policy with regard to energy sources and disposition for many years to come, has attempted to give very serious thought to the matters that are to be considered by your Commission. Consequently, we tried to assemble -- and I think we were quite successful in assembling -- a very representative group of Manitoba citizens, who were representative of the various industries and organizations and regions which are connected with the primary energy sources either produced in or used in the Province of Manitoba. Mr. Chairman, we are not pretending that having assembled that group for earlier discussions and consideration of the questions before your Commission that we necessarily are presenting a viewpoint that is wholly accepted by all of them, because you will recognize that with such diverse interests, and with some of the energy sources that these people represent actually competing with one another, it is inevitable there should

be some differing points of view; but, we did try to give the various individuals and organizations and regions an opportunity of at least getting together in the early stages of our discussion of the briefs to be laid before your Commission, and they have had some acquaintance and gave valuable advice regarding the general procedure which we would adopt for what I might term "the Provincial brief". Certainly, we are not attempting to claim that they are bound by the provisions of that brief just because they sat in; but we were glad to have their presence in the early stages and to have their advice. I am sure it is altogether likely some of them will introduce briefs of their own in addition to what this one says.

This one is the Manitoba government brief. Its preparation, after having had that rather widely representative group in the early stages, we left to a smaller advisory group -- to prepare the actual document.

Because of commitments that I have mentioned, and others unnamed, I am not going to attempt to read the brief to the Commission myself. There are others here who are more familiar with the details than I. I would like the Commission to note that we have had a smaller Advisory Committee which has been composed of the Deputy Provincial Treasurer, Mr. Stuart Anderson, whom the Commission members

have already met; Mr. W. Fallis, the General Manager of the Manitoba Power Commission; Mr. D.M. Stephens, the Chairman and General Manager of the Manitoba Hydro-Electric Board; Mr. Jack Cowan, the Deputy Minister of Mines and Natural Resources; and then two other young men, who, along with Mr. Cowan, will present the actual brief. Mr. Cowan will present the part dealing with oil, its production and regulation in the Province of Manitoba. Mr. Robert Keyes, who is an economist and assistant to the General Manager of the Manitoba Hydro-Electric Board, will present the section dealing with general introduction and proposal that the Province of Manitoba has advanced in some detail earlier, and which we would like to lay before your Commission at this time, believing it to be an appropriate one to pass judgment upon it, of not only a Manitoba development but a national grid, electrically, originating with the power sites on our northern rivers. Mr. Robert Moffat, economist and lawyer, who has been retained by the Province of Manitoba in connection with this brief, will deal with some of the questions relating to import and export of fuels, energy, particularly oil and gas.

I think now, Mr. Chairman, I have only one other thing to say, and that is to remind the members of the Commission that we stand ready here to give them any assistance we can, and we are

looking forward with a lot of interest -- because we believe it is of great concern to our Province (as you have mentioned yourself, we are a consuming Province in total) -- to the recommendations and findings that you make, and want to give you any assistance that we can.

I welcome you to the Province; we are going to have a little informal dinner tonight to which all members of the Commission and their associates are invited, and if I don't manage to spend very much time with you today I will certainly be looking forward to seeing you later on.

I would now call upon Mr. Robert Keyes to present the first part of the brief.

THE CHAIRMAN: Thank you very much, Mr. Premier.

Mr. Patterson?

MR. PATTERSON: Mr. Chairman, before proceeding with the reading of the brief I would like just to outline for those present the timetable of the hearings to be held in Winnipeg.

We will proceed, first of all, with the submission of the Province of Manitoba, to be followed by that of Trans-Prairie Pipelines Ltd. Tomorrow, should we complete the hearing of those two submissions, we will hear in this order from the following: that is, for Thursday, May 22, we will hear from Saskatchewan Coal

Operators, Hudson Bay Mining and Smelting Company Limited and The Great Plains Gas Company Limited. Copies of this timetable will be available after the noon adjournment for any interested persons.

Turning, Mr. Chairman, to the submission of the Province of Manitoba, I would ask that that submission be marked as Exhibit W-21-1, and I have discussed with the gentlemen who will be reading it the omission in the reading of certain parts of it. The whole will, of course, be reproduced in the transcript, but I have suggested that pages 16 to 41 and pages 58 to 76 be taken as read, and perhaps from time to time, when we reach certain other tables, I will suggest that those be taken as read.

If Mr. Keyes would proceed, those are my remarks.

---EXHIBIT NO. W-21-1: Submission of Province of Manitoba.

Submission of

THE PROVINCE OF MANITOBA

APPEARANCES:

Mr. J. Cowan	-	Deputy Minister of Mines and Natural Resources
Mr. R.W. Keyes	-	Assistant to General Manager, Manitoba Hydro-Electric Board
Mr. R. Moffat	-	Counsel

MR. KEYES: Manitoba is keenly interested in the work of your Commission. There are few subjects which are of such great moment to the people of this province. Much of the history of Manitoba can be expressed in the efforts of our people to overcome two great obstacles. From the very earliest days in this area two great needs have been paramount. We needed transportation to bring in supplies and to move out our products, and we required a source of heat energy to provide warmth and light during our

long cold winters.

Food, we can and do grow in abundance; much of our clothing can be locally produced or brought in without great difficulty, but transportation and fuel have always been limiting factors in our growth and development.

Your Commission is concerned with fuel in its broadest sense, meaning coal, oil, gas, electricity and any other sources of energy. You are vitally concerned with the transporting of energy by oil pipeline, by gas pipeline, by electrical transmission line and less directly by railway cars of coal.

We need only suggest these fundamentals without further elaboration. The great importance of energy and fuel to Manitoba is clearly established without any need to elaborate its importance to our industry and commerce.

Looked at in this way it is at once apparent that the great concern of the people of Manitoba must be with the securing of an adequate and reliable supply of energy at reasonable prices, prices which do not place us at a competitive disadvantage with any other area in Canada or in the markets in which we buy and sell.

In your hearings before today you have dealt with parts of Canada in which energy resources are much more abundant relative to local demands.

In Alberta you heard from an area that is a substantial supplier of oil, gas and coal to adjacent and remote parts of Canada and the United States. To a lesser extent the same situation exists in Saskatchewan although we were interested to note that the Saskatchewan Government declared its belief that Saskatchewan's primary interest is on the side of energy consumption and that it is particularly concerned with conditions under which energy is made available for use. British Columbia, because of its climate, has a much lower per capita demand for space heating fuels and consequently it was to be expected that your hearings would be concerned more completely with industrial uses of energy and with matters arising from the distribution of gas and electricity for industrial and commercial purposes.

Now, in Manitoba, for the first time, you come into an area in which consumption of imported fuels is extremely high. In various parts of this brief we have set out more fully our position in respect to the different aspects of energy production, distribution and consumption. But here, at the outset, we emphasize a few of the fundamentals:

1. We are a heavy consumer of energy, particularly for space heating.

2. Hydro-electric power is the only energy resource

in which our supply position is relatively favorable and in it we have already fully developed all waterpower sites within convenient reach of our main settled areas.

3. Until very recently we depended, almost exclusively, for space heating, upon coal brought in by railway, mainly from Alberta and Saskatchewan.

4. With the growth of oil production in the other Prairie Provinces, we too have had a modest success and at present oil production in Manitoba stands at about 48 per cent of our consumption of petroleum products.

5. We have no commercial production of natural gas, but a substantial market is building up now that Alberta and Saskatchewan gas is available by pipeline.

These then, are some of the basic facts of Manitoba's energy position. They form the foundation of our plans, our proposals, and for our future needs.

SCOPE OF THIS BRIEF. In planning for this brief and the research which underlies it we have tried to be guided by the wishes of your Commission as conveyed to us from time to time.

We have been aware, from your terms of reference, that you had authority to range over the whole field of energy and its supply, use,

conservation and regulation within the jurisdiction of the Government of Canada. On the other hand, we were conscious of the wish, which you had expressed in your early discussions, that you should hear first, views on oil and gas.

In our preparations we, therefore, began by reviewing the whole field laid out by your terms of reference, but with special attention being directed to oil and gas. It quickly became apparent, however, that the subject matter could not be divided into compartments in this manner and as our research progressed the overlapping and interrelationships became increasingly complex. Further, we noticed that, as evidence is presented before you, the character and extent of some of the subjects with which you must deal changes to a degree. Therefore, as your deliberations unfold further, even on this subject of oil and gas, we are of the opinion that we should reserve judgment in some areas.

The brief which is being presented today, is therefore, a compromise. On some subjects we have attempted to give you a comprehensive analysis and thoroughly considered proposals; on other subjects we have attempted to give you relatively complete factual data, but analysis has been relatively restricted. On still other subjects we have merely indicated avenues of investigation which appear to

be worthwhile.

We would, therefore, like to ask that this brief be accepted in this spirit and be treated in many of its sections as merely an indication of subjects for further investigation and not as a firm and final expression of opinion. With your permission, we would propose that, at a later date, we may wish to make further representations containing the results of further analysis and presenting any new or elaborated conclusions or recommendations.

PART B. MANITOBA ENERGY CONSUMPTION AND SUPPLY. We now turn to some of the detailed problems facing the Commission as well as to a presentation of some of the factual data about oil and gas which you asked to have put before you. Before so doing, however, it appeared important to us to indicate in a more detailed manner the nature and extent of the consuming market in Manitoba, and to draw your attention to some of the factors influencing the demand for and supply of the various energy sources in the province.

With the exception of waterpower with which resources it has been endowed most favorably, Manitoba is a net importer of the energy supplies that it needs to do its work. It will unfold as this brief develops that this position is not likely to change much in the near or medium-term future without some dramatic development, consequently,

Manitoba's interest in the exploitation of fossil fuels, and, indeed in energy use generally is as a consumer.

The current annual demand for all types of energy in Manitoba amounts to between 110 and 130 trillion Btu's or about 140 million Btu's per capita. This is the equivalent of about 10 tons of lignite coal, or some 840 gallons of oil, for every man, woman and child in the province, and represents an increase in the ten years since 1947, the first year in which it is reasonably possible to derive meaningful data from published statistics, of better than 50 per cent. We estimate that the domestic and commercial markets make up about 48 per cent of Manitoba's total consumption; the industrial market about 19 per cent; and transportation uses, about 32 per cent. The balance shows up mainly in conversion losses and statistical inaccuracies.

SUPPLY. At the present time the greater part of Manitoba's energy requirement is supplied by petroleum (62%), followed by coal (23%), water-power (11%), and wood (4%). Natural gas reached Manitoba late in 1957, and consequently does not show as an important source of supply in that year. It will play an increasingly important role in the future.

APPARENT ENERGY CONSUMPTION IN MANITOBA (Billions of Btu's)

	Coal	%	Petroleum	%	Water Power	%	Wood	%	Total
1947	31,600	46	20,800	31	8,400	12	7,300	11	68,100
1949	34,100	45	25,300	34	9,000	12	7,100	9	75,500
1951	34,200	38	37,100	41	10,400	12	8,000	9	89,700
1953	27,300	30	47,000	51	11,100	12	6,800	7	92,200
1955	29,400	27	62,300	56	12,400	11	6,400	6	110,500
1957	28,200	23	74,200	62	12,800	11	4,900	4	120,100

Notes:

1. Statistics on coal, petroleum and water power are from D.B.S. Wood consumption is estimated based on studies of the Dominion Coal Board, and on the number of households reported as using wood as the principal heating fuel.
2. The approach used in "disappearance of supply" i.e., domestic production (or interprovincial transfer) plus or minus international movements adjusted for stock change. End use statistics on a provincial basis are quite inadequate for absolute compilations.
3. Water power is valued at the number of Btu's (3,412) in a kilowatt hour. Some authorities use the quantity of fossil fuel required to produce a kilowatt hour. If the latter approach had been followed total energy consumption in Manitoba would have been shown at a 30% higher figure. This points up the importance of hydro-electric power to the Manitoba economy.

Petroleum: This brief is concerned in detail with the development of the petroleum market in Manitoba. At this juncture it is desirable to point up merely that there has been a remarkable growth in the last ten years stimulated by the economic expansion of the province and the construction of some 30,000 barrels daily of new refining capacity

based on the availability of western Canadian crude. In addition, petroleum has competed most successfully in the domestic space heating market. In the period, 1941 to 1957, the proportion of households served by heating oil has grown from the very small position of 1/2 of 1 per cent to about 42 to 44 per cent in mid-1957. I might add that those are principal heating fuels. In the same period the total number of households has increased by more than one-third from the 164,000 reported in the 1941 census. In terms of the equivalent volume of crude oil needed to manufacture the product requirement, petroleum consumption has quadrupled in ten years to reach about 35,000 barrels daily in 1957. Provincial refining capacity now stands at 35,000 barrels per day as compared with 4,500 barrels per day in 1946, so that on balance the province could manufacture all its current requirements. In practice, however, the limitations of technology coupled with the pattern of demand, and the economics of the industry are such that some product is imported into Manitoba from outside the province and indeed the country. At the same time Manitoba refined products reach out eastward beyond the Lakehead to supply a good portion of the needs of the people and industry of western Ontario. Petroleum's share of the total Manitoba energy market has grown from 31 per cent in 1947 to 62 per cent in 1957.

Coal: Manitoba has no known economic resources of coal. Its present market of about one and three-quarter million tons annually is supplied predominantly (68%) from the lignite fields in the Estevan area of southeastern Saskatchewan. The balance is divided on an approximate ratio of 3.2 as between Alberta bituminous originating mainly in the Crow's Nest area, and Alberta sub-bituminous, mined in the Lethbridge -- Drumheller districts. The market for coal in Manitoba has suffered seriously in the past ten years as a result of competition from petroleum, largely in the domestic space heating market and as a result of the conversion by the railways of their locomotives to the burning of heavy fuel oil. While the over-all tonnage sold has moved within close limits of 1.75 million tons per year, the relative share of the total energy market served by coal has declined drastically. From a 45 to 50 per cent share in 1947, coal has seen its relative position reduced by one-half to about a 23 per cent supplier of Manitoba's over-all energy needs by 1957.

Waterpower: Manitoba was one of the early Canadian provinces to recognize the value of hydro-electric power, the first generating station of 8,000 kilowatt capacity coming into production in 1906. This station, the first of seven built on the Winnipeg River to serve Winnipeg and southern Manitoba, has since been dismantled. This river,

now fully developed as to sites, has six generating stations with a normal winter capability of some 560,000 kilowatts, measured at the generator terminals. The horsepower rating of the turbines is 788,000. There is an additional 16,000 horsepower constructed in northern Manitoba on the Laurie River and on the Island Lake River to serve mining properties. At present, the Island Lake River station (1,900 HP), known as Kanuchuan, is not in operation. The Hudson Bay Mining and Smelting Company at Flin Flon is served by a hydro-electric generating station located on the Churchill River in Saskatchewan. The total Manitoba requirement for electrical energy in 1957 was about 3,750 million kilowatt hours, virtually all of which was generated from hydro-electric generating stations. In this period waterpower as a source of energy has generally retained position, and continues to supply about 11 per cent of the province's over-all energy requirement.

Wood: The use of fuelwood as a source of heat is disappearing rapidly in this country and this province, particularly as technological change in the pulp and paper and ancillary industries has developed. Its use is currently limited to the hinterland or in remote areas relatively inaccessible at present to the fossil fuel.

Future Prospects: It is generally recognized that there is a close correlation between energy

consumption and economic growth. (See, for example, Putnam, "Energy in the Future", Van Nostrand Company, 1953.) Satisfactory relationships on a regional basis are more difficult to measure, consequently the forecast presented herein should be considered as simply an indication of the possible market magnitude. The forecast assumes a per capita increase in the consumption of all energy of about 3 1/2 per cent per annum, and a population by 1970 in the province based on Manitoba's Submission to the Royal Commission on Canada's Economic Prospects. Accordingly, we anticipate a demand for all types of energy in the next fifteen years as follows:

Year	Billions of Btu's
1960	140,000
1965	180,000
1970	230,000

This projection serves simply to emphasize Manitoba's continuing interest as a large consumer of energy.

PART C. INTERRELATIONSHIP OF ENERGY USE.

As a province with a basic consumer interest and as one with vast untapped waterpower resources in the north, Manitoba is conscious of the complexities and interrelationships of energy use in the marketplace, either domestic or international. We are perhaps more conscious of this than other areas of Canada more generously endowed with oil and

natural gas resources, the development of which is of very great concern to the Commission and to Canada at this time. We are perhaps more conscious of this, too, than other areas in Canada which have available to them a greater flexibility in the means of transportation. We are concerned about the dangers of an interim report based on a partial examination of the whole field of energy, particularly if any such report should result in a disturbance of normal market relationships through subsidies, quotas or tariffs.

To illustrate, it might be useful to dwell for a moment on the current position of the electrical industry in Manitoba.

As indicated earlier, the hydro-electric sites most adjacent to the centres of load have been fully developed. To meet the growing requirements of its customers in southern Manitoba, the Manitoba Hydro-Electric Board, a crown corporation of the Province of Manitoba, has turned to thermal sources. Two generating stations are presently under construction, one of 132,000 kilowatt capacity located at Brandon will be in complete operation by the winter of 1958. The second station, under construction at East Selkirk, about twenty miles north of Winnipeg, will have an initial capacity of 132,000 kilowatts. It will be completed during 1960 and 1961. Each station has been designed

to use coal, oil or gas with the minimum of inconvenience and cost. The entry of Manitoba into the field of thermal-electric generation in a relatively large way (City of Winnipeg Hydro Electric System has had a standby steam plant of 10,000 kilowatts for some thirty-three years, the capacity of which was increased in 1952 and in 1954 to 50,000 kilowatts) has brought into recent and sharp focus in another manner, the province's landlocked position relative to the movement of fuels and its heavy dependence on the transportation media of this country. In every other province in Canada, there are alternatives to provide a degree of flexibility in the matter of fuel supply to thermal-electric generating stations which it has not been possible to achieve to date in Manitoba. We are irked that the cheapest transportation unit we can buy in the railway movement of coal is a carload when other major consuming areas are either able to move their fuel requirements by the bulk boatload, or have large fuel reserves on hand from which to draw with relatively small transportation charges. This is perhaps not a matter of direct concern to your Commission, but it does bear indirectly on your investigations regarding a national fuel policy. We in Manitoba, as with other provinces and regions, find that we feel the effects of a national policy which has produced a fairly rigid

rail transportation network and pricing mechanism. An example of a possible danger which may ensue from this can be drawn once again from the area of fuel supply to thermal-electric generating stations in Manitoba.

Canadian national policy has been directed often since Confederation towards mitigating the effects of the country's transportation handicap. Through national programs the costs of alleviating the burden imposed by our geographical limitations have been levied against the whole country, through the national taxing authority. The St. Lawrence Seaway is one of the most recent manifestations of this national policy.

The Federal Government recently announced an extension of the subsidy on the movement of Alberta coal to the Lakehead for general industrial use in competition with imported United States' coal. As a further instrument of national policy to mitigate the effects of distance as outlined above, Manitoba and indeed all provinces are asked to pay their share of this subvention. It is possible, however, as a result of the St. Lawrence Seaway, and through the more efficient use of Great Lakes' shipping because of a better balance between up and down-bound cargoes, that the laid-down cost of imported coal at the Lakehead will be lowered, and that consequently the taxpayers in all

provinces will be called upon to pay their share of such additional assistance as may result from any increased subvention. This would amount to a "double charge" against the taxpayers, which would not be in the national interest, and would be at variance with the objectives of the seaway.

We hasten to point out that this thought has been given only cursory examination, and consequently may not stand the test of rigorous scrutiny. There appeared, however, to be sufficient merit in the possibility to offer it to you as one area of investigation, and one area where the implications of national policy sometimes may be rather oblique.

Mr. Chairman, I would like to read here an insert.

The anomaly which exists now as the result of this subvention in so far as the producer of thermal-electric energy in Manitoba is concerned is that the effect of the full subsidy on the movement of Alberta coal to the Lakehead, if used for thermal-electric generation, is to place the cost of this energy at approximately 10¢ per million Btu's less at Fort William than at Brandon or Winnipeg, and this for energy which has travelled in the raw material form an additional four hundred odd miles. Now, obviously there are alternative fuels available to the thermal-electric producer in Manitoba, so that he is not directly injured by this situation.

We point it up simply to emphasize the complex nature of the entire field and the oddities that are produced when what might be termed normal market relationships are subject to adjustment.

We are concerned too about some of the apparent inconsistencies in the matter of the export of energy generally which appear to require some analysis, analysis which we hope will be undertaken by your Commission, before the immediate matter of the export of natural gas is brought to a conclusion. In this regard, but perhaps more as a suggestion of an area for study in the matter of a national energy policy, we now draw the attention of the Commission to a proposal made by Manitoba at the recent Dominion/Provincial Conference on Fiscal Relations. This relates to the interprovincial and perhaps international movement of electrical energy.

A National Transmission Policy: The presentation to the aforementioned Fiscal Conference said in part:

> "One important remaining area where......a national development policy could be applied is in the electrical power field. In the entire southern half of our country, a rapid growth in power requirements has almost exhausted nearby sources of hydro-electric power and is forcing many areas to consider a much greater

use of thermal power. Yet the northern half of Canada still has very substantial hydro-electric power potentials. One has only to mention Mica Creek, Frobisher and the Rocky Mountain trench in British Columbia, the Saskatchewan Rivers in Alberta and Saskatchewan, the Nelson and Churchill Rivers in Manitoba, the numerous streams running into Hudson Bay in Ontario and Quebec, and the Hamilton River in Labrador to emphasize the truth of this statement.

"At the present time these power sources are not being developed because they are so far from our centres of population. Studies by our own experts, however, indicate that if substantial blocks of the power available on the Nelson River could be brought to southern Manitoba, even the costly transmission facilities would eventually be highly economic. These studies show that a 75 per cent load would enable this northern power to compete with alternative sources.

"In the ten to fifteen years needed to build the load up to this level, however, the carrying charges on these transmission lines would be so heavy that unless substantial government help were forthcoming, our utilities could not afford to finance them and would instead

be forced to turn to thermal power sources. Moreover, as additional thermal stations are constructed, their existence might serve to delay the development of these northern power resources indefinitely.

"We suggest,................, that a sound development policy in this field would be one in which your government would undertake to construct, in areas where they would become economic, long-distance electric power lines over which power could be transmitted on a toll basis -- the toll to be set at a level which would cover interest and carrying charges once the line was being used at 75 per cent capacity. In the meantime, during the period of demand build-up, the Federal Government would meet these charges. If such a proposal were implemented, it is possible to visualize a vast electric power grid which would eventually be interconnected from the Atlantic to the Pacific.

"Such a policy would have many advantages. The construction of these transmission facilities by making possible the earlier development of the power resources in the north would give a sharp stimulus to the development of northern Canada. It would hasten the utilization of one of our remaining undeveloped natural resources,

a resource which is completely renewable and now simply runs to waste. With the Federal Government's role restricted to the ownership of the transmission facilities, the decision as to whether private or public interest should generate and distribute the power could be left in provincial hands. By helping to promote uniform standard of transmission this policy would ultimately facilitate the interconnection of our many Canadian power systems.................."

Subsequent, but preliminary studies of the development of a portion of the head on the Nelson River indicate that, if immediate markets could be found for substantial blocks of power even for relatively short periods, the annual cost per kilowatt hour of production is more attractive than the currently available alternative of thermal-electric generation. Such markets are not now available in southern Manitoba, but will develop in time. A reaching out beyond the boundaries of the province for markets either to the east, west, or south would improve, however, the time prospect of an economic venture. It is the expansion of the transmission network to the available markets which is the most serious handicap to the development of northern Canadian waterpower sites, a handicap not unlike that recently faced by the Trans-Canada Pipe

Lines Limited.

In the matter of the development of markets for electrical energy we note that the attention of the Commission has been drawn to an apparent anomaly in existing federal regulation regarding the export of energy or its sources. That is that, with the exception of natural gas, a yearly permit must be secured from the Department of Trade and Commerce. In the case of natural gas the regulation presumably provides for a longer period. We note also that representations have been made indicating an inability to secure authorization for the export of electrical energy. We note as well that the western coal industry has made representations regarding its market position among other things. Manitoba holds no opinion as to the adequacy of the specific representations which have been made. It does, however, suggest that there is something inconsistent in the current situation, particularly when it is related to the immediate question of the export of natural gas now facing your Commission. To illustrate hypothetically, if the export of natural gas is to be allowed without a change in the present policy relative to the export of power, the result could be a refusal to allow the power producer, say in Alberta or in Saskatchewan, to use natural gas or coal as a raw material in the manufacture of electrical energy for export, but an authorization to another

group to remove these resources from the ground beneath his generating station for use internationally. We hope the Commission will devote some of its research and analysis to this question.

---A short recess.

MR. COWAN: PART D. SECTION 1. MANITOBA PETROLEUM INDUSTRY. DEVELOPMENT OF OIL PRODUCTION IN MANITOBA.

The first oil well was brought into production in Manitoba in 1951 and since that date the recorded output has been:

1951	11,000 barrels
1952	107,000 barrels
1953	656,000 barrels
1954	2,148,000 barrels
1955	4,145,000 barrels
1956	5,786,540 barrels
1957	6,089,000 barrels

As pointed out in the introductory chapter this 1957 output was equivalent to about 48% of the petroleum products consumed in Manitoba.

Manitoba's oil production is, therefore, of a size which must not be overshadowed by developments in the other prairie provinces. In 1957 Manitoba produced almost as much oil as the whole of Canada produced in 1947.

1. Ownership of Mineral Rights:

In any attempt to assess the importance of oil production on Manitoba and its residents one sharp contrast with Alberta and Saskatchewan must

be kept clearly in mind.

In Manitoba approximately 83% of the underrights are owned by private individuals or companies and only 17% are owned by the province. Consequently, oil well drilling and the buying or leasing of oil rights is very largely a matter between private persons or companies and those engaged in exploration and development.

In contrast the Province of Alberta owns some 80% of the underrights in its area and in Saskatchewan the corresponding figure is approximately 65%. Furthermore, in the two western provinces a large proportion of the privately held underrights are owned by a few large corporate owners.

Two vital consequences flow from this distinction.

1. the Manitoba government is largely a supervisor and administrator of oil resources in its capacity as a representative of the people of the province whereas in Saskatchewan and Alberta the governments are very large owners of oil and gas lands who have a vital stake in the revenue to be divided from selling oil and gas or from leasing oil and gas lands.
2. the person or firm engaged in exploration or development of oil or gas in Manitoba is in a position not unlike that of his opposite number in the United States who must make arrangements

with private owners subject to the regulations laid down by the state. Here again the situation is different in Alberta and Saskatchewan where the local farmer is usually involved only with respect to his surface rights and damage to his crops or his fences and buildings, but has no direct interest in the amount or value of the oil produced.

This state of affairs exists due to a change of policy by the Dominion in 1890. In the early settlements of the prairie provinces the generally accepted method of acquiring land was "by taking up a homestead", and the lands available for homestead entry were administered by the Dominion. At first a homestead granted to an owner carried to him full ownership of surface and underrights. But, by a Dominion Order-in Council, which became effective on January 11, 1890, homestead entries granted after that date covered the surface rights only. In other words, mines and minerals were reserved to the Dominion, which at that time administered Crown Lands in Western Canada. It is interesting to record that the hope was that the Crown would thus retain the ownership of coal and possibly metallic minerals. There seems to have been no thought that petroleum rights were of any importance.

By 1890 the greater portion of Southern Manitoba had already been settled and consequently,

mineral rights were already transferred to private owners. Settlement in both Saskatchewan and Alberta, generally speaking, took place at a much later date and for most of those provinces under-rights remained in the ownership of the Crown. When Crown Lands were transferred in 1930 from the Dominion to the provinces there was still no realization of the large values represented by these underrights. which had been held on large acreages of homesteads.

Consequently, when Manitoba acquired, in 1930, the Crown Lands within its boundary it acquired the underrights in only a small proportion of its settled area. The balance of the under-rights had, many years before, been acquired by private owners.

After 1930 attention was first directed toward mineral developments in the northern pre-cambrian shield area and although a number of attempts to find oil had been made it was not until June, 1947, that the first oil and gas reservations, nine in number, were issued in Manitoba.

2. Early Exploratory Development:

From June, 1947, to February, 1951, large amounts were expended under the reservations in question, both in exploration and drilling, but without success. In February, 1951, California Standard Company, the holder of the reservations, brought in the first commercial oil well in Manitoba

approximately twelve miles southwest of Virden. This was the discovery well located in what later became the Daly Field where there are now two hundred and four wells capable of production, of which one hundred and sixty-eight produced during March, 1958.

In August, 1953, the discovery well in what later became the Virden-Roselea Field was brought in. This well was the first flowing well in Manitoba and was located on the edge of the Town of Virden. The field now completely surrounds the town. In fact, there are thirteen producing wells located within the limits of the town itself. The field now contains two hundred and eighty-seven wells capable of producing, of which two hundred and thirty-eight produced during March, 1958.

The success in the vicinity of Virden resulted in additional exploration, which finally resulted in the discovery of the North Virden-Scallion Field, our most prolific producer, containing two hundred and forty wells capable of production, of which two hundred and thirty-one produced during February, 1958.

In addition to the Daly, Virden-Roselea and North Virden-Scallion Fields, there are quite a number of smaller fields which with additional drilling will develop into sizable fields.

Manitoba appears to have certain advantages so far as production of crude oil is

concerned, namely:

a) Shallow Wells: Average well depths range from 1,750 feet in the Bekker area northeast of the Birden-Roselea Field to 3,300 feet in the former Lulu Lake Field. The word "former" is used there due to the fact that field has recently been abandoned. The largest part of the production is from the three major fields with average well depths of from 2,000 feet in the North Virden-Scallion Field, 2,100 feet in the Virden Roselea Field to 2,500 feet in the Daly Field. Wells of these depths can be drilled at a cost of between $30,000 and $40,000 compared with $100,000 and upwards in areas where drilling depths are in excess of 5,000 feet.

b) Quality of Oil: The bulk of oil produced to date grades from 31.0° to 36.0° A.P.I., which compares favorably with the best of the western basin crudes.

c) Proximity to Market: The transportation of oil to market, even by pipeline, costs money and Manitoba being relatively closer to the consuming markets is in a preferred position.

Manitoba was fortunate in that the Interprovincial Pipe Line (constructed before there was any commercial production in Manitoba) runs practically through the middle of the present potential oil area, with a pumping station at Cromer on the western

edge of the area to which the crude could be delivered.

Most drilling done to date has been shallow. Of the one thousand, three hundred and forty-seven wells drilled up tothe end of 1957 only fifty had penetrated to the pre-cambrian. The discovery of ordovician and silurian oil in Montana and North Dakota has stimulated interest in these deeper formations in Manitoba.

There has been substantial completion of the drilling in the major fields and unless new pools are discovered it would appear that production will level off somewhere between six and seven million barrels per year. At the present time there are eight hundred and seventy-three wells capable of production and seven hundred and forty-six actually producing. The Canadian Petroleum Association in its submission to the Commission, February 7, 1958, stated that in 1957 Manitoba's crude production found markets as follows:

Prairies	6%
Ontario	43%
U.S.A.	51%
Total	100%

SECTION 11. GEOLOGY.

The Post-Cambrian sedimentary rocks of Manitoba are situated on the northeastern edge of the Williston Basin in the southwestern corner of the province. Paleozoic sediments of Ordovician to Mississippian age dip gently to the southwest at

approximately sixteen feet per mile towards the basin. These sediments are primarily carbonates. The Paleozoic sequence is overlain with marked unconformity by Mesozoic sediments, of Jurassic and Cretaceous age, which dip less steeply to the southwest at about ten feet per mile, and consist largely of clastic sands and shales. Locally, flat-lying Tertiary sediments are present in the Turtle Mountain area.

The entire stratigraphic succession has been subjected to Cenozoic erosion and especially Flesitocene glaciation which has progressively truncated the Ordovician and younger strata to the east, forming long linear north-northwest trending outcrop belts partially covered by glacial and post-glacial deposits. All systems present in Manitoba except the Mississippian outcrop along these belts. Mississippian strata are buried by the overlapping Mesozoic sequence, and are found only in the subsurface of the southwestern part of the province.

Sedimentary rocks occur throughout approximately 70,000 square miles in southwestern Manitoba. The sediments attain a maximum thickness in excess of 6,000 feet in the extreme southwestern corner of the province, and thin rapidly to the northeast due to both erosion and depositional thinning.

To date oil production in Manitoba has

been obtained only from Mississippian rocks which underlie about 6,000 square miles in the extreme southwest corner of the province. The most important occurrences are found in the Daly and Virden areas where the oil occurs in the structural-stratigraphic traps in limestone beds of Lodgepole age. The primary control is structural, and the oil is located on gentle, irregular, anticlinal noses or ridges. The oil has been trapped at the erosion surface by a secondary anhydrite-dolomite zone that occurs at the top of Mississippian. This zone is the result of weathering prior to deposition of the Jurassic red beds. The weathering was also effective in increasing reservoir porosity. The secondary zone is very tight and impermeable, and forms an effective seal at the top of the Mississippian throughout the Daly area and most of Manitoba and adjacent parts of North Dakota and Saskatchewan.

The reservoir rocks in which the oil is found in the Daly area are predominantly fine to medium fragmental, crinoidal limestones which are in part biostromal in nature. No true biohermal or reef type deposits are known in the Mississippian of this area. In the Virden and other areas, oolitic to partly crinoidal limestones form the reservoir rocks.

Several smaller oil accumulations occur at

Pierson, Tilston, Whitewater Lake, and Lulu Lake. These occurrences are similar to those in the Virden and Daly areas.

Although no production has been obtained from the pre-Mississippian rocks of the province, production from Devonian rocks of Montana and North Dakota, and recent discoveries in Siluran and Ordovician strata of North Dakota, North Central Montana and Southern Saskatchewan, indicate the possibility of oil occurrences in equivalent formations of Manitoba. The Silurian and Devonian rocks of Manitoba are characterized by reef structures and zones of porosity; oil stains have been observed in some of the Devonian rocks.

Large areas underlain by pre-Mississippian rocks have yet to be tested. The bulk of the drilling in Manitoba has been done in that area of 6,000 square miles, in the extreme southwest part of the province, where the Mississippian rocks overlie the Ordovician, Silurian and Devonian strata. Most of the wells drilled there reached only the Mississippian or Upper Devonian. Less than 20 of them passed completely through the Devonian and reached the Silurian, Ordovician or Precambrian. Outside of that area, about 55 wells have penetrated the Ordovician and/or Silurian. Most of these 55 wells also passed through the Devonian, where it overlies the older systems; most of them also reached the

Precambrian basement. All but 5 of these 55 wells (reaching the Silurian, Ordovician, or Precambrian) and a few others that reached the Devonian but not the underlying systems, are confined to a wedge-shaped area, of about 20,000 square miles, bounded on the north by latitude 50° 45'N, on the southwest by the erosion edge of the Mississippian on the east by the boundary between the Ordovician and Precambrian.

Hence in the total area of 26,000 square miles south of latitude 50° 45'N although many wells reached the upper part of the Devonian, only about 70 wells passed through the Devonian, Silurian, or Ordovician. There are, furthermore, an additional 44,000 square miles, north of latitude 50° 45'N and west of Lake Winnipeg in which only 4 wells have been drilled to the Precambrian, 5 to the Devonian and 1 to the Silurian.

Nothing is known of the oil-bearing potentialities of another area covering 25,000 square miles in the northeast part of the province, around Hudson Bay, where Ordovician and Silurian rocks overlie the Precambrian.

In the extreme southwestern part of the province where Mississippian rocks are present, the overlying Jurassic and Cretaceous have been penetrated by all wells drilled into the Mississippian; consequently the Jurassic and Cretaceous have been more throughly tested in that area than have the

Devonian, Silurian and Ordovician. In the 11,000 square miles of Jurassic and Cretaceous rocks east of the Mississippian erosion edge and south of latitude 50° 45'N a total of 100 (including structure test holes) wells have penetrated these systems. Forty of these are wells drilled to the Devonian and older rocks; the remaining 60 are mainly structure tests that did not pass completely through the Cretaceous and for the most part were drilled in clusters covering small areas.

Throughout most of the 15,000 square miles underlain by Jurassic and Cretaceous rocks north of latitude 50° 45'N in the western part of the province, the Jurassic and Cretaceous systems have received little attention. The only exception is an area of about 1,400 square miles in the Duck Mountains where a large number of structure test holes have been drilled.

In some of the Jurassic and Cretaceous sections, lenses of porous sandstone interbedded with shale display stratigraphic relationships favorable to oil accumulation. In Saskatchewan, major production is obtained from the Viking sand. The Ashville sand of Manitoba is correlative with the Viking but as yet neither the Ashville nor the similar Cretaceous and Jurassic sands have yielded encouraging oil shows in Manitoba.

SECTION 111. EXPLORATION AND PRODUCTION.

1. History of the Search for and Discovery of Oil in Manitoba (J.D. Allan - Exploration for Oil and Natural Gas in Manitoba): The first drilling for oil in Manitoba was undertaken in 1887. Prior to that time, in 1873, 1874 and 1880, the Geological Survey of Canada had drilled 10 wells for the purpose of obtaining geological information, primarily in regard to ground water supplies, and beds of coal or other useful minerals.

In 1887 a Manitoba charter was granted to the Manitoba Oil Company, which drilled a well on the Vermilion River about 12 miles southwest of the town of Dauphin. This well reached a depth of 292 feet when mechanical failure made it necessary to suspend operations for the year. In the following year, the drill was moved a short distance down the valley, and a second well was drilled to a depth of 743 feet, bottoming in the Devonian. No indications of oil or gas were obtained in these wells, so the company did no further work.

Many of the wells drilled in the province prior to 1900 were in search of water, and the geological information obtained was merely a by-product; most notable were those drilled by the towns of Rosenfeld, Deloraine and Morden to depths of 1,037, 1,943 and 601 feet, respectively.

From 1900 to 1930, charters were granted to several companies interested in oil and gas

exploration. Many of these charters were cancelled with no wells having been drilled.

In the 1930's there was a renewed interest in oil and gas exploration and several wells were drilled into the Palaeozic formations. Among these were the Dauphin, Commonwealth Manitou No. 2 and Lisgar wells. A well drilled near Neepawa for the recovery of salt brine provided valuable geological information.

In 1943, the Manitoba and Saskatchewan Oil and Gas Development Syndicate was formed which, in 1944 and 1945, drilled the Portage la Prairie No. 1 and the Gilbert Plains No. 1 wells to depths of 1,540 and 1,370 feet respectively. In 1947, Langford Oil Syndicate drilled the Langford No. 1 well, near the town of Neepawa, to the Precambrian basement at 2,506 feet, the first well drilled with a rotary rig in Manitoba.

In 1949, A.R. Coutts drilled the Brandon Coutts No. 1 well to a depth of 840 feet in the Lower Cretaceous. In 1949, Souris Valley Oil Company, Limited drilled two wells near Lyleton, Gordon White No. 1 to a depth of 5,160 feet and Robert Moore to a depth of 6,030 feet. Way-wasecapow Oil Company Limited drilled three wells in the vicinity of Birdtail: in 1936 -- Cleland No. 1 to a depth of 1,209 feet and Cleland No. 2 to a depth of 928 feet, and in 1949 the Jean Cleland

No. 3 to a depth of 1,956 feet. In 1949 the Whiteside No. 1 well was spudded near Badger and reached the Precambrian at 615 feet in 1950.

During 1950, the greatest total footage of any year to that date was drilled in Manitoba in search for oil and gas. Red River Oil Ltd. drilled two wells, Red River Oil No. 1 near Garson and Red River Oil No. 2 near Lowe Farm, to depths of 622 and 953 feet respectively. This company also did some structural drilling in the vicinity of Lowe Farm. The California Standard Company drilled California Standard Hartney 16-33 to a depth of 5,138 feet. The Souris Valley Oil Company, Limited drilled the Downey No. 1 well near Lyleton to a depth of 3,228 feet where it was suspended for the winter because of mechanical difficulties. Brandon Coutts No. 2 was drilled by Manitoba Gas and Oil Syndicate to a depth of 3,865 feet. Red-Man Oils Limited drilled four structural test holes in the vicinity of Birdtail.

The earlier wells drilled in Manitoba were located on assumed structures or by non-scientific methods. In 1947, Brandon Exploration Company, a subsidiary of The California Standard Company, took out several geological and geophysical reservations on Crown mineral rights in the southwestern part of the province. Geophysical surveys were made within these reservations in 1947 and have been

continued each year since. Most of the geophysical work consisted of seismic surveys, but some gravity meter surveys were also made. In 1950, Souris Valley Oil Company Limited made a gravity meter survey in the extreme southwest corner of the province.

In 1950, geological and geophysical reservations were taken out by Imperial Oil Limited, Shell Oil Company, Limited, and Red River Oil Limited. Imperial Oil Limited and Shell Oil Company, Limited, made seismic surveys of these reservations.

Many of the earlier wells drilled in Manitoba reported small "shows" of oil and gas, but nothing of any consequence was noted. On November 16, 1950, five feet of oil saturated core were recovered from the Downey No. 1 well. This core was important because it was the best indication obtained to that date of the presence of oil in the Palaeozoic rocks in Manitoba. The first recoverable oil in a significant quantity was obtained on January 20, 1951, from the California Standard Daly 15-18 well.

2. The Location and Extent of Present Oil Discoveries in Manitoba: Spurred on by the discovery well, Calstan Daly 15-18-10-27, drilling increased rapidly and by March 31, 1958, the following fields had been declared:

Field	Discovery Well	Finished Drilling
Daly	Calstan Daly 15-18-10-27 (15-18-10-27)	12/1/51
Tilston	Calstan Tilston Prov. 5-32-5-29 (5-32-5-29)	18/7/52
Lulu Lake	Royalite Triad et al No. 1 (16-14-1-21)	6/12/52
Virden Roselea	Roselea 9-28 (9-28-10-26)	29/7/53
Whitewater	Calstan Whitewater 12-16-3-21 (12-16-3-21)	17/9/53
North Virden	Calstan Scallion Prov. 3-11-11-26 (3-11-11-26)	8/12/53
Pierson	Northern Pierson No. 7-11 (7-11-3-29)	28/1/54
Woodnorth	B.A. Canadian Superior Woodnorth No. 1 (3-33-8-27)	6/4/54
Ebor	Dome Harris Cox Ebor 14-23 (14-23-9-29)	31/8/54
Maples	Imperial Virden 5-9-10-26 (5-9-10-26)	16/2/55
Routledge	McCarty & Coleman Routledge 3-33 (3-33-9-25)	25/5/55
West Butler	Calstan West Butler 1-31-9-29 (1-31-9-29)	3/11/55
Kirkella	Dillman-Plymouth-Kirkella No. 1-10	15/9/57
West Routledge	Vanderschaeghe 13-17 (13-17-9-25)	9/12-57

By the end of 1957, operations of the Lulu Lake Fields had become uneconomical and all wells were abandoned.

Significant oil discoveries have been made in the following areas:

South Regent	Sec. 7	- Twp. 4	- Rge.21	W.P.M.
Regent	Secs.21 & 34	- Twp. 4	- Rge.22	W.P.M.
Waskada	Sec. 18	- Twp. 1	- Rge.25	W.P.M.
Bekker	Sec. 32	- Twp.10	- Rge.25	W.P.M.
South Maples	Sec. 26	- Twp. 9	- Rge.26	W.P.M.
Homestead	Secs.29,31 & 32	- Twp.10	- Rge.26	W.P.M.
West Scallion	Sec. 30	- Twp.11	- Rge.26	W.P.M.
Coulter	Sec. 21	- Twp. 1	- Rge.27	W.P.M.
West Ebor	Sec. 16	- Twp. 9	- Rge.29	W.P.M.
Canart	Sec. 16	- Twp.11	- Rge.29	W.P.M.

3. STATISTICAL SECTION. Manitoba Crude Production.

Tables:

1. Total wells drilled 1947 - 1957
2. Average well depth, by field or area
3. Classification of wells drilled, 1957
4. New crude producers, by months, 1951 - 1957
5. Number of wells and footage drilled, 1956 - 1957
6. Crude production by fields, 1951 - 1957
7. Water production by fields, 1951 - 1957
8. Crown Mineral Rights - Acreage and wells to 31/3/58 by fields
9. Crude oil sales - freehold and Crown, 1951 - 1957
10. Crude oil analyses

Figures: (See original brief)

1. Wells drilled, 1947 - 1957
2. Footage drilled, 1947 - 1957
3. Oil wells and dry holes, 1947 - 1957
4. Wells capable of production, 1951 - 1957
5. Crude oil production, 1951 - 1957

6. Average daily production - crude, 1957

7. Oil fields, pipelines, and potential areas in Manitoba

Table 1: Total Number of Wells Drilled - 1947-1957

Year	Oil Wells	Dry or Salt Water Injection	Total
1947	-	1	1
1948	-	1	1
1949	-	4	4
1950	-	4	4
1951	5	9	14
1952	39	37	76
1953	70	25	95
1954	215	92	307
1955	279	80	359
1956	202	60	262
1957	127	97	224
Total	937	410	1,347

At December 31, 1957, there were 846 wells capable of production. 89 former producing oil wells have been abandoned or converted to salt water injection.

Table 2: AVERAGE WELL DEPTH

Field or Area	Average Well Depth (feet)
Daly	2,500
Virden-Roselea	2,100
North Virden Scallion	2,000
Bekker	1,750
Coulter	3,200
Ebor	2,650
Hargrave	2,200
Kirkella	2,550
Lulu Lake	3,300
Maples	2,200
Pierson	3,300
Routledge	2,100
Tilston	3,100
Waskada	3,100
West Butler	2,750

Field or Area	Average Well Depth (feet)
West Ebor	2,750
West Routledge	2,150
Whitewater	2,600
Woodnorth	2,500

Table 3:

CLASSIFICATION OF WELLS DRILLED - 1957

FIELD WELLS

Field	Oil	Dry	S.W.D.	Total
Daly	3	-	1	4
Virden-Roselea	37	8	3	48
North Virden Scallion	54	4	4	62
Routledge	19	2	-	21
Tilston	2	-	-	2
Total	115	14	8	137

OTHER AREAS

	Oil	Dry	S.W.D.	Total
Wildcat	3	67	1	71
Development	9	7	-	16
	12	74	1	87
Total	127	88	9	224

Table 4:

NEW CRUDE PRODUCERS
By Months/By Years

	1951	1952	1953	1954	1955	1956	1957
January	-	-	4	7	31	17	13
February	1	2	1	15	21	15	21
March	-	1	-	19	16	16	14
April	1	1	1	15	8	12	7
May	-	1	-	3	19	6	5
June	-	-	6	7	29	11	21
July	1	3	6	15	29	19	25
August	-	4	14	17	26	18	9
September	1	4	4	12	26	24	6
October	1	5	9	20	32	25	2
November	-	7	11	27	19	13	3
December	-	5	9	25	17	21	13
	5	33	65	182	273	197	139

Table 5:

NUMBER OF WELLS AND FOOTAGE DRILLED 1956 - 1957

	WELLS		FOOTAGE	
Month	1956	1957	1956	1957
January	23	29	54,947	63,977
February	19	24	45,880	56,050
March	20	23	49,193	48,797
April	3	-	8,169	-
May	11	15	23,080	32,203
June	19	41	42,176	95,021
July	25	26	57,394	61,507
August	30	21	70,064	52,867
September	29	9	66,027	21,216
October	28	9	65,048	23,116
November	31	12	69,840	28,062
December	24	15	52,101	33,033
TOTAL	262	224	603,919	515,849

(See next page for Table 6)

CRUDE PRODUCTION* AND TOTAL VALUE

Field Areas as at December 31, 1957

Field	Allowable B.O.P.D.	Wells Capable Dec.31/57	1951	1952	1953	1954	1955	1956	1957	Cumulative
Daly	75	205	11,409	100,568	575,185	1,239,187	1,415,823	1,222,398	1,045,641	5,602,949
Virden-Roselea	60	287	-	-	56,483	622,291	1,364,499	1,782,675	2,097,405	5,923,353
North Virden	70	226	-	-	448	161,110	877,334	2,184,462	2,347,994	5,569,886
Ebor	35	11	-	-	-	2,485	43,542	36,495	23,585	106,107
Lulu Lake	37	nil	-	-	1,484	520	18,150	18,431	3,130	41,715
Maples	34	11	-	-	-	-	67,616	83,562	72,119	223,297
Pierson	37	7	-	-	-	25,018	50,376	35,416	32,265	143,075
Routledge	60	32	-	-	-	-	22,766	84,844	242,725	350,335
Tilston	36	9	-	3,005	10,950	14,819	21,396	26,404	18,533	95,107
West Butler	85	6	-	-	-	-	1,689	32,878	17,404	51,971
Whitewater	35	6	-	-	4,420	24,729	28,227	25,604	22,769	105,749
Woodnorth	45	16	-	-	-	48,039	187,976	202,879	106,129	545,023
Other Areas	50	30	256	3,546	6,700	10,251	46,163	50,492	60,044	186,376
		846	11,665	107,119	655,670	2,148,449	4,145,757	5,786,540	6,089,743	18,944,943
Total Value			$25,349	$181,561	$1,657,987	$5,566,268	$9,516,665	$13,417,267	$15,230,517	$45,595,614

*Source -- Department of Mines and Natural Resources

WATER PRODUCTION *

Field Areas as at December 31, 1957

Field	1951	1952	1953	1954	1955	1956	1957	Cumulative
Daly	956	6,316	84,138	262,720	1,059,802	1,350,307	1,573,982	4,338,221
Virden-Roselea	-	-	1,198	73,479	448,178	1,635,847	2,976,422	5,135,124
North Virden	-	-	-	15,105	90,066	365,059	787,148	1,257,378
Ebor	-	-	-	175	11,402	8,982	2,223	22,782
Lulu Lake	-	-	1,494	-	8,00[illegible]	13,254	5,002	27,750
Maples	-	-	-	-	58,868	287,695	595,695	872,307
Pierson	-	-	-	3,070	29,041	17,626	22,903	72,640
Routledge	-	-	-	-	6,165	72,093	169,039	247,297
Tilston	-	6,360	133,563	3,072	4,275	36,083	19,865	203,218
West Butler	-	-	-	-	201	14,067	2,303	16,571
Whitewater	-	-	68	442	405	322	910	2,147
Woodnorth	-	-	-	2,812	37,382	127,034	112,118	279,346
Other Areas	3	11,966	72,454	26,845	35,660	62,229	82,267	291,424
Total	959	24,642	292,915	387,720	1,789,445	3,990,598	6,279.926	12,766,205

*Source - Department of Mines and Natural Resources

CROWN MINERAL RIGHTS BY FIELDS

Acreage and Wells to March 31, 1958

Field	Total Acreage	Total Wells	Crown Acreage	Crown Wells	Crown Acreage %	Crown Wells %
Daly	26,036	204	7,032	73	27.0	36.0
Virden-Roselea	20,800	287	3,040	35	14.6	12.2
North Virden Scallion	17,280	240	1,280	16	7.4	6.7
Ebor	4,800	11	800	-	16.7	-
Kirkella	2,560	4	960	3	37.5	75.0
Lulu Lake	1,600	3	1,600	3*	100.0	100.0
Maples	2,720	11	-	-	-	-
Pierson	3,840	7	1,280	7	33.3	100.0
Routledge	4,160	37	800	7	19.2	18.9
Tilston	1,920	9	640	2	33.3	22.2
West Butler	2,560	6	1,920	2	75.0	33.3
West Routledge	1,920	10	640	4	33.3	40.0
Whitewater	2,560	6	510	-	19.9	-
Woodnorth	4,480	15	1,280	6	28.5	40.0
Total	97,236	850	21,782	158	22.4%	18.6%

*Lulu Lake field was cancelled March 1, 1958.

CRUDE OIL SALES

Freehold and Crown

1951 - 1957

Year	Freehold (bbls)	Crown (bbls)	Total (bbls)	Freehold $	Crown $	Total $
1951	1,603	8,442	10,045	4,007	21,342	25,349
1952	38,651	42,447	81,098	83,139	98,422	181,561
1953	468,700	162,032	630,732	1,244,056	413,931	1,657,987
1954	1,578,937	525,101	2,104,038	4,183,052	1,383,216	5,566,268
1955	3,197,297	916,043	4,113,340	7,396,184	2,120,481	9,516,665
1956	4,757,026	1,021,289	5,778,315	11,079,574	2,337,693	13,417,267
1957	4,895,255	1,165,506	6,060,761	12,335,978	2,894,539	15,230,517
Total	14,937,469	3,840,860	18,778,329	$36,325,990	$9,269,624	$45,595,614

Table 10:

CRUDE OIL ANALYSES
(Department of Mines and Technical Surveys - Analyses of Canadian Crude Oils)

	Specific Gravity A.P.I. @ 60° F.	Sulphur % by weight	Viscosity S.U. @100°F.
Daly	33.0	1.47	46
Daly	32.4	1.72	46
Virden-Roselea	33.2	1.43	48
Virden-Roselea	35.5	1.38	44
North Virden	32.8	1.47	46
North Virden	34.4	1.57	43
Ebor	34.6	1.47	44
Kirkella	24.7	2.28	93
Lulu Lake	34.0	0.92	45
Maples	36.0	1.39	40
Pierson	34.4	1.02	44
Routledge	35.2	1.30	41
South Regent	31.0	1.20	53
Tilston	32.9	0.94	46
Waskada	36.0	0.82	39
Woodnorth	33.6	1.02	44

A comparison with Redwater Crude shows:

	Redwater	Man. Composite	Daly	Virden-Roselea
Gravity °A.P.I.	34.5	34.3	33.0	35.5
Sulphur W %	0.473	1.57	1.47	1.38

These analyses indicate crudes very similar to Redwater except for higher sulphur content.

4. Proved and Probable Oil and Natural Gas Reserves: The present proved reserves of crude oil in the province have been developed during the past seven years. The Department of Mines and Natural Resources has not prepared an estimate of reserves and accepts those presented by The Canadian Petroleum Association, although the Department is inclined to feel that the estimate of probable reserves is low because of conservative

judgment applied to relatively limited data.

(Canadian Petroleum Association Submission to the Royal Commission on Energy - Oil and Gas Reserves in Canada)

Crude Oil (barrels)

Proved		34,258,000
Probable		5,065,000
	Total	39,323,000 barrels

Natural Gas (MMCF)

Proved		2,993
Possible		467
	Total	3,460 MMCF

It is expected that secondary recovery programs will be applied to certain reservoirs in the province and will materially improve the ultimate recovery of crude oil from them. A limited water flood has been operating in the Daly Field for the past five years (including the pilot flood period). The program has been successful in stimulating a substantial increase in production from the wells affected by the water flood in contrast with the normal sharp decline shown by all other Daly Field wells.

To date, no reserves of associated or non-associated free gas have been developed. The natural gas reserves shown above consist of solution gas produced with the crude oil, usually in quantities insufficient to operate the treater, and could not be gathered and marketed.

a) Proved Reserves (Canadian Petroleum Association Submission to the Royal Commission on Energy -- Proved and Probable Oil, Natural Gas and Natural Gas Liquid Reserves.): In calculating proved reserves of oil, natural gas and natural gas liquids, the Canadian Petroleum Association Reserves Committee follows closely the principles established by the American Petroleum Institute's Committee on Petroleum Reserves, and the Committee on Natural Gas Reserves of the American Gas Association.

The proved undrilled reserves in any pool include reserves under undrilled spacing units which are so related to the drilled units that there is every reasonable expectation that they will produce when drilled. As a general rule in partially developed fields, only lateral and diagonal offsets to drilled wells are included. However, where the geological information is such that there is every reasonable expectation that undrilled spacing units further removed will produce when drilled, such spacing units are included.

In the case of new discoveries, both of new fields and of new pools in old fields, in which there is only one well drilled at the time of making the estimate, it is the practice to use only one spacing unit for reserve calculations except where sufficient information is available to warrant taking in a larger area.

In a pool in which wells have been drilled, cased and found uncommercial after production tests, no reserves are estimated.

Reserves which become available as a result of fluid injection are regarded as proved only after a thorough test by a pilot project, or after operation of an installed fluid injection procedure has actually demonstrated certainty of increased recovery.

Estimates or proved recoverable natural gas reserves are those calculated to be producible down to an abandonment pressure considered practicable.

Reserves of natural gas liquids in respect to an oil field are included only when there is a plant in operation for the recovery of the liquids. In the case of a wet gas field, or a substantial gas cap overlying an oil column, reserves of natural gas liquids are included in the estimates whether or not there is a plant in operation.

Experience has demonstrated that proved reserves calculated by these rules are less, overall, than ultimate recovery.

b) Probable Reserves (Canadian Petroleum Association Submission to the Royal Commission on Energy -- Proved and Probable Oil, Natural Gas and Natural Gas Liquid Reserves.): Probable reserves of oil, natural gas and natural gas liquids

were estimated for submission to this Commission. The additional reserves included in these estimates result from the following:

(1) Larger areal extent of proved fields, or the area assigned to discovery wells with relatively thick pay sections, which reasonably can be expected to produce on the basis of geological or geophysical information available.

(2) Additional reserves which may become available as a result of fluid injection. Included in this category are reserves from fields where pilot plants have actually indicated the probability of additional recovery as a result of fluid injection, or where laboratory studies have indicated probable increases. In certain instances, increased recovery was only estimated for the area where plans have been formulated for fluid injection.

(3) Increased recovery from presently proved fields. The increased recovery is based on reservoir studies which indicate that more oil probably will be recovered, but such reserves cannot be considered in a proved category until substantiated by additional reservoir performance.

5. Secondary and Assisted Recovery Methods: Shortly after the discovery of the Daly Field in 1951, it was realized that by primary

recovery methods alone a large part of the oil in place would not be recovered.

During 1953, a 5-spot water Pilot Flood was commenced in the Daly Field and has since been expanded to 16 water injection wells. The water is gathered from batteries throughout the Daly Field and injected after treatment. This flood has been successful in stimulating production in the wells affected by the flood in contrast to the normal sharp production decline shown by other Daly Field wells.

Studies for recovery stimulation in the other major fields are continuing.

6. Crude Oil Field Prices: The field price of crude in Manitoba reflects generally conditions at Sarnia and the Manitoba field's location relative to this market via the Interprovincial Pipe Line Company system. According to the 1957 Annual Report of Interprovincial Pipe Line Company, the tariff per barrel from Cromer, the point of delivery most adjacent to the Manitoba fields, to Gretna, Manitoba, the take-off point for delivery to Winnipeg refineries, was 12¢. The tariff per barrel from Cromer to Clarkson and Port Credit, Ontario, the present terminus of the pipeline is 56¢.

The major oil companies post two prices for crude from the various fields in Manitoba, the first is the price delivered in the field to the

Trans-Prairie Pipe Lines Limited system, and the second is the price when delivered into the Trans-Prairie Pipe Lines Limited system at Cromer. In the main, the field prices reflect net producer return, whereas the Cromer posted price contains an element of truck tariff which must be deducted to obtain the producer return.

The table following indicates the changes in the posted price for Daly crude from late 1952 to the present.

Development of Manitoba Crude Pricing

Daly Field

Effective Date	Price	Point of Delivery
October 15, 1952	2.575	Interprovincial @ Cromer
December 21, 1952	2.515	"
March 19, 1953	2.575	"
July 21, 1953	2.835	"
January 14, 1954	2.70	Trans-Prairie System @ field
October 15, 1954	2.61	"
January 7, 1955	2.54	"
February 16, 1955	2.34	"
January 16, 1957	2.52	"
July 10, 1957	2.50	"
August 30, 1957	2.46	"
April 12, 1958	2.39	"

The only thing I would like to make there, Mr. Chairman, is that you will note there is a very serious drop: January 7th, 1955, the price was 2.54 and on February 16, 1955, the price was 2.34: a drop there of 20 cents. This was due entirely to the penalty for the sulphur content of the oil. Up to that time our production had been relatively small, and companies had not considered it too

important that the penalty be invoked, but when the production did increase they invoked the penalty and it dropped 20 cents a barrel.

Prior to the time that the Trans-Prairie Pipe Lines Limited gathering system went into operation on January 14, 1954, the field price was posted by Imperial Oil Limited for all crudes without distinction. This price reflected delivery into the Interprovincial Pipe Line Company system at Cromer. From January 14, 1954, when the Trans-Prairie Pipe Lines Limited system went into operation the price of crude at Daly was based on delivery at the field, while other Manitoba crudes reflected prices based on delivery into producer tanks at Cromer, with no distinction as to field.

On November 1, 1954, the gathering system in the Virden-Roselea Field was completed and a price for that field was posted.

In mid-February, 1955, Trans-Prairie Pipe Lines Limited established receiving facilities at Cromer for trucked crudes allowing various fields and areas to be distinguished. Prices were posted accordingly.

Although Manitoba crude oil contains a higher sulphur content than Redwater, no sulphur penalty was imposed until early in 1955. At this time the volume of production reached a level where it was reported as being no longer possible to mix

Manitoba crude with other crudes without effecting refinery processes. Accordingly and effective February 16, 1955, the Manitoba crude oil field price was reduced by a penalty based on a sliding scale of 2¢ per barrel for each 1/10 of 1 per cent sulphur above 0.49 per cent.

SECTION 1V. TRANSPORTATION.

1. Pipelines: There are four oil pipelines or pipeline systems operating in Manitoba -- Interprovincial Pipe Lines Company, Trans-Prairie Pipelines Limited, Winnipeg Pipe Line Company and a pipeline owned and operated by Anglo-Canadian Oils Limited.

The movement of crude oil in Manitoba is from west to east and is shown on the Plan of Pipe Lines, Figure 1A. The Interprovincial Pipeline enters the province nine miles northwest of Cromer pumping station. Manitoba's major oil producing areas and refineries are linked by pipeline with the Interprovincial Pipe Line and Manitoba crude oil enters this pipeline at Cromer pumping station.

The Interprovincial pipeline is tapped south of Brandon to supply the Anglo-Canadian Oils refinery at Brandon. This pipeline is owned and operated by Anglo-Canadian Oils Limited.

Trans-Prairie Pipelines Limited has built one hundred and five miles of gathering system

which serves portions of the Daly, Virden-Roselea, North-Virden Scallion, Woodnorth, Routledge and West Routledge Fields.

Winnipeg Pipe Line Company Limited tap the Interprovincial pipeline at Gretna and supply the Imperial Oil Limited refinery in the R.M. of East St. Paul and the North Star Oil Limited refinery in St. Boniface.

Trans-Prairie Pipelines Limited (Application to Board of Transport Commissioners for Canada -- September 19, 1955, -- Trans-Prairie Pipelines of Canada Limited.) was incorporated under the laws of the Province of Manitoba by letters patent dated August 5, 1954, for the purpose of acquiring, constructing, owning and operating pipelines and gathering systems.

In August, 1954, the company purchased from the Northern Development Company Limited the physical assets of an oil pipeline put into operation in January, 1954. This line gathered oil from the Daly Field for delivery to Interprovincial Pipe Line Company's pumping station at Cromer. This pipeline consisted of four miles of six inch and three miles of four inch main line, and three miles of four inch and three inch diameter lateral tie lines.

Trans-Prairie Pipelines Limited operates in Manitoba, under "The Pipe Line Act" ("The Pipe

Line Act" -- Cap. 26 1954 S.M.). Throughput in 1957 averaged approximately 14,352 barrels per day and, at the year end, the following Trans-Prairie Pipelines Limited tariffs were in effect:

From	To	Rate in Cents per barrel (Trans-Prairie Pipelines Limited - Local Tariff No.14
Daly Area	Cromer	13¢
Virden-Roselea Area	Cromer	11¢
North-Virden Area	Cromer	11¢
Woodnorth Area	Cromer	25¢
East Cromer Area	Cromer	25¢
Routledge Area	Cromer	22¢
Tank Truck Unloading	Cromer	3¢

Winnipeg Pipe Line Company Limited (The Manitoba Gazette -- Vol. 79 No. 20 May 20, 1950) was incorporated under the laws of the Province of Manitoba by letters patent, dated May 6, 1950. Throughput for the year 1957 was 9,027,000 barrels, an average of 24,732 barrels per day. The Winnipeg Pipe Line Company Limited operates under "The Pipe Line Act". The tariff in effect currently is:

From	To	Rate in Cents per Barrel
Gretna	Winnipeg	8¢

Interprovincial Pipe Lines Company report the following tariff in effect for Manitoba Points (Interprovincial Pipe Lines Company B.T.C. no. 13 and I.C.C. no. 18):

From	To	July 1, 1957
Redwater	Souris Junction	34¢
Redwater	Gretna	38¢
Redwater	Sarnia	66¢
Cromer	Souris Junction	8¢
Cromer	Gretna	12¢
Cromer	Sarnia	48¢
Cromer	St. Paul Park,Minnesota	28¢

SUMMARY OF MANITOBA CRUDE OIL PIPE LINES

	Anglo-Canadian Oils Limited	Interprovincial Pipe Line Co. * & Lakehead Pipe Line Company Inc.	Trans-Prairie Pipelines, Ltd.	Winnipeg Pipe Line Company Limited
Point of Origin	Interprovincial Pipe Line	Redwater, Alta.	Southwest Manitoba	Gretna, Manitoba
Destination	Brandon	Port Credit, Ont.	I.P.L. Cromer Pumping Station	St. Boniface
Length of Trunk (miles)	15.25	1931 2778.8 (incl. loops)	105	76.68
Size of Pipe	4", 5 1/2"	16",18",20",24",26",30"	3", 4", 6"	8 5/8", 10 3/4"
Source of Crude	Interprovincial Pipe Line	Western Canadian & Trans-Prairie at Cromer	North Virden Scallion, Virden-Roselea, Daly Woodnorth, West Routledge, & Routledge Fields	Interprovincial Pipe Line
Capacity (b/d)	5,000 Est.	300,000	23,000	40,000 Est.
1957 Throughput (barrels)	912,500 Est.	99,251,268	6,041,832	9,027,000
Manitoba Refineries/ Pipelines served	Anglo-Canadian Refinery	Anglo-Canadian Pipe Line Winnipeg Pipe Line	Interprovincial Pipe Line at Cromer Pumping Station	Imperial Oil & North Star Oil Refineries

* Canadian Petroleum Association Submission to the Royal Commission on Energy - February 7, 1958

2. Truck Haulage: Approximately 13.3 per cent, or some 803,000 barrels, of the total crude oil produced in 1957 was transported by truck to the truck receiving depot provided by Trans-Prairie Pipelines Limited at Cromer. Medium gravity crude from the Kirkella field in amounts of about 200 barrels daily is trucked to the Canadian Pacific Railway at Kirkella and shipped by tank car to Husky Oil and Refining Limited at Fort William.

The truck tariffs in effect at present are (Department of Mines and Natural Resources):

From	To	Rate in Cents per Barrel
Daly and East Cromer Area	Cromer	16¢
Virden-Roselea Area	Cromer	25¢
North Virden Area	Cromer	27-28¢
Ebor Area	Cromer	16¢
Maples Area	Cromer	25-28¢
Pierson Field	Cromer	55¢
Routledge Area	Cromer	28¢
South Regent Area	Cromer	57¢
Tilston Field	Cromer	50¢
Whitewater Field	Cromer	60¢
Woodnorth Field	Cromer	18¢
Kirkella Field	Kirkella	10¢

SECTION VI. REFINING AND MARKETING.

1. Early Supply: Manitoba has been, historically, a high cost area for petroleum products. Prior to the discovery of oil in Western Canada in 1947, Manitoba's requirements had to be hauled long distances from outside at high transportation charges. There were three small refineries in the province which used crude imported from Montana and Texas, but the bulk of

the province's requirement was imported in product form through the Lakehead from Sarnia and Montreal refineries.

Following the discovery of crude at Leduc, some product manufactured from Canadian crude began moving into Manitoba by rail from Regina, but the bulk of the province's needs still had to be brought in over the long lake and rail route from the east. The construction of the Interprovincial pipeline changed the situation. The pipeline made it economically feasible to construct local refining capacity sufficient to meet provincial requirements on balance.

2. Refining Capacity in Manitoba: Manitoba has experienced a remarkable expansion in refining capacity during the past ten years, largely due to the availability of crude oil and to the demands resulting from increased farm mechanization, the switch to automatic space heating, the increase in the number of motor vehicles,and industrial expansion.

The following table shows the development of crude oil capacity in Manitoba:

Manitoba Refinery Capacity (in barrels per day)

Year	Crude Capacity	Year	Crude Capacity	Year	Crude Capacity
1946	4,500	1950	7,800	1954	20,000
1947	4,500	1951	20,500	1955	29,800
1948	4,500	1952	19,700	1956	29,800
1949	7,300	1953	20,000	1957	35,200

Department of Mines and Technical Surveys, Canada 1957 - Oil in Canada

Anglo-Canadian Oils Limited operates an oil skimming and cracking refinery at Brandon with a throughput capacity of 3,200 B/D. The thermal cracking plant has a capacity of 1,375 B/D. The plant also includes a catalytic reforming unit. Plans for 1958 include the construction of a 1,000 B/D platformer and 50 B/D polymerization unit.

Imperial Oil Limited operates a refinery in the R.M. of East St. Paul with a crude oil capacity of 18,000 B/D. The fluid catalytic cracking plant has a capacity of 6,000 B/D and plans for 1958 include the construction of a 3,150 B/D powerformer.

North Star Oil Limited operates an oil refinery in St. Boniface, classed by the Dominion Bureau of Statistics as "complete", with a throughput capacity of 12,000 B/D. The fluid catalytic cracking plant has a capacity of 5,000 B/D. The plant also contains vacuum distillation and catalytic polymerization units. Plans for 1958 include the construction of a 2,700 B/D catalytic desulphurizing unit and a 2,700 B/D catalytic reforming unit.

Radio Oil Refineries Limited operates an oil skimming refinery in East Kildonan. Crude oil capacity is shown as 2,000 B/D, but, at the present, it is believed the plant is not in operation.

Product Sale in Manitoba: The demand for petroleum products in the Province of Manitoba has

increased most dramatically since the end of World War II. Preliminary figures for the year 1957 indicate a requirement of some 13,073,000 barrels, almost four and one-half times provincial consumption in 1946. One of the more significant features of this growth is the increase in the consumption of "middle distillates". This refinery cut includes tractor distillate, kerosene, stove, diesel, furnace and other light fuel oils. This increase reflects the large share of the home heating market taken over by oil in the last few years as well as the extension of mechanization on Manitoba farms. The huge increase in the demand for "other petroleum products", including lubricating oils and greases, aviation gasoline, heavy fuel oil, wax, asphalt, naphtha specialties and liquified petroleums gas, indicates the growth and diversification of the Manitoba economy. The bulk of this increase is heavy fuel oil (Bunker "C") for railway and industrial use, and reflects availability as a result of the expansion in refining capacity.

The table shown overleaf indicates the growth in petroleum demand in Manitoba since 1946, and is an aggregate of the crude equivalent to the products manufactured in Manitoba and those imported to the province.

Current Market Prospects: On the basis

of past trends, with consideration for such factors influencing the future as population growth, industrial development, motor vehicle use and the like, a projection has been made of the future petroleum market in the Province of Manitoba. Expressed in daily barrels of crude equivalent, this forecast is as follows:

1958	38,000
1959	40,000
1960	42,000
1965	53,000
1970	63,000

(See next page for Table 11)

MANITOBA'S PETROLEUM PRODUCT REQUIREMENT

(000's Bbls)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Motor Gasoline	1,955	2,283	2,563	2,754	3,119	3,448	3,440	4,169	4,288	4,262	4,575	4,842
% of Total Products	66	65	66	65	63	56	51	50	46	43	40	37
Middle Distillates	825	1,003	995	1,021	1,184	1,541	1,698	2,153	2,503	2,947	3,725	3,865
% of Total Products	28	28	26	24	24	25	25	26	27	29	32	30
% of Gasoline & Middle Dist.	94	93	92	89	87	81	76	76	73	72	72	67
Motor Gas. & Middle Dist.	2,780	3,286	3,558	3,775	4,303	4,989	5,138	6,322	6,791	7,209	8,300	8,707
Other Pet. Products	180	244	302	485	682	1,231	1,617	2,028	2,444	2,806	3,250	4,366
Total Petroleum Demand	2,960	3,530	3,860	4,260	4,985	6,220	6,755	8,350	9,235	10,015	11,550	13,073

REFINERIES IN MANITOBA*

Operating Statistics - 1957

	Anglo-Canadian Oils Limited	Imperial Oil Limited	North Star Oil Limited	Radio Oil Refineries Limited
Location	Brandon	Winnipeg	St. Boniface	Winnipeg
Type	S.C.	S.C.A.	Comp.	S.
Date of First Operation	1938	1951	1927	1930
Source of Crude	Alberta	Mixed Western	Mixed Western	
Crude Oil Capacity B/CD	3,200	18,000	12,000	2,000
Cracking Plants Units	Thermal - cracking	Catalytic - fluid	Catalytic - fluid	-
Cracking Capacity B/CD	1,375	6,000	5,000	-
Other Units	Cat. Poly Cat. Reforming		Cat. Poly Vac. distillation	-
Proposed for 1958	1,000 BSD Platformer; 50 BSD Poly Unit	Powerformer	2,700 b/d Cat. desulphurizing; 2,700 b/d Cat. reforming	-

*Source: Canadian Petroleum Association Submission to the Royal Commission on Energy - February, 1958
Oil in Canada, May 6, 1957

SECTION V. ADMINISTRATION.

1. History of Mineral Rights in Manitoba: Shortly after the Province of Manitoba was admitted to Confederation in the year 1870, extensive plans for the development and colonization of the newly formed Province were started. The first important step was the establishment of a Dominion Land Office in Winnipeg which opened on the 1st of August, 1871. The Dominion Government immediately proceeded to formulate schemes for the rapid settlement of the lands it had acquired under the terms of the Rupert's Land Act of 1868. One of the principal provisions of this Act provided for a guarantee that the Hudson's Bay Company would be permitted to retain its Trading Posts and that it would be granted a one-twentieth share of every surveyed Township of land situated within the Rupert's Land area for a period of fifty years. This accounts for the fact that within the Province of Manitoba the Company obtained title to 1,263,960.94 acres of land together with all mines and minerals, except the precious metals.

The next important step was to arrange for grants of land and to provide other assistance to the Railway Companies with a view to accelerating the construction of railways and branches, thus promoting a more rapid mode of colonization. This in turn accounts for the fact that the Railway

Companies obtained a total of approximately 2,213,801.66 acres of land which also included the mineral rights.

In addition, legislation was enacted on the 25th of April, 1871, for the setting aside of 1,400,000 acres of land for every Half-Breed resident in Manitoba on the 15th of July, 1870, and every child of such Half-Breed resident was also entitled to participate in the Grant. This act was amended to conform with the Manitoba Act Grant and the allotment of Half-Breed Scrip was confined to the children of heads of Half-Breed families. Later it was necessary to add two additional townships of land to the tract of 1,400,000 acres already set aside. These Half-Breed Grants included the mines and minerals as well as the surface rights.

Subsequently, regulations were drawn up to provide for the following types of free grants to individuals, Companies, Corporations and Colonization projects, viz: Manitoba Act Grants, Homestead Entries, Military Bounty Grants, Drainage and Swamp lands to the Province of Manitoba and a gift of 150,000 acres of lands as a means of providing funds for the establishment of the University of Manitoba.

It was not until the year 1883 that interest was evidenced in the development of mines and

minerals and, on the 7th of March, 1884, an Order-in-Council was passed governing regulations applicable to all Dominion Lands containing gold, silver, cinnabar, lead, tin, copper, petroleum, iron, or other mineral deposit of economic value, with the exception of coal. As noted earlier in the brief, it was not until 11th of January 1890, that an Act was assented to whereby the mines and minerals underlying all future grants, not covered by previous legislation, were to be reserved in favor of the Crown. Thus, much of the vast unknown reservoir of mineral wealth lying in the southern portion of the province had been disposed of by way of freehold grants before its importance and potential wealth had been recognized. The Commission should keep this fact in mind when interpreting the following enactments, rules and regulations, particularly if such interpretation is to be made in the light of conditions existing in Manitoba and Saskatchewan.

2. Administration of Mines and Minerals Prior to 1930: The mineral resources owned by the Crown in the Province of Manitoba were for the most part, administered by the Department of the Interior of the Dominion Government up to the time of transfer of the Natural resources to the Province on July 15, 1930.

Prior to the 11th January, 1890, lands

granted as homesteads or sold included the mines and minerals. On the 17th September, 1889, regulations were approved for the sale, settlement and use of Dominion Lands in the Province of Manitoba which did not become effective until 11th January, 1890.

Section 8 of these regulations required that:

> "All patents form the Crown for lands in Manitoba shall reserve to Her Majesty, Her Successors and Assigns, forever, all mines and minerals which may be found to exist whether upon or under such lands, together with full power to work the same and for this purpose to enter upon and use and occupy the said lands or so much thereof and to such an extent as may be necessary for the working of the said minerals or the mines, pits, seams and veins containing the same, except in the case of patents which have already been sold or disposed of for valuable consideration or for lands which have been entered as homesteads before the date upon which these regulations came into force."

In 1874 the Dominion of Canada granted to the Province of Manitoba certain drainage lands which were administered in a manner similar to the administration of the Dominion Government by which the mines and minerals were conveyed to the Patentee.

On the 10th June, 1887, an act cited as "The Manitoba Provincial Lands Act, 1887" was passed respecting the sale and management of Provincial Lands. This act covered all lands acquired or to be acquired by the Province of Manitoba, "whether earned under the Statutes of Orders-in-Council of this Province or of the Dominion of Canada relating to the drainage of submerged or swamp lands, or the granting of swamp lands to this Province for public purposes, lands foreclosed under mortgages or acquired for arrears of taxes and all lands that may be or become vested in her Majesty for the use of this Province---." Under this Act all mines and minerals including gravel were reserved to the Crown in the right of the Province.

The Dominion Orders-in-Council and Regulations effective from July, 1905 and up to the transfer of the Natural Resources in July, 1930 referred to in the Alberta Department of Mines and Minerals brief, also governed the administration of oil and gas rights in the Province of Manitoba.

This Province first enacted a statute governing the disposition of mining locations and setting out "general rules" to be observed by the mining industry in 1913. This statute was "The Mines Act", Chapter 128 of The Revised Statute

of Manitoba 1913. This Act remained unchanged until 1927 when power was granted to the Lieutenant-Governor-in-Council to make additional general rules.

3. Administration of Mines and Minerals After 1930: The following is a brief resume of the Acts and amendments affecting the administration of mineral lands in Manitoba which have been enacted by the Legislative Assembly since 1928. Those regulations adopted under these Acts which pertain to the oil and natural gas industry are also briefly reviewed.

The Mines and Natural Resources Act Chapter 42, Statutes of Manitoba 1928, assented to March 9, 1928 created the Department of Mines and Natural Resources. This Act and an amendment thereto being Chapter 28, Statutes of Manitoba 1930 also provided for the appointment of the officials necessary for departmental administration.

In 1930 "The Mines Act" chapter 128 of the revised Statutes of Manitoba 1913 was repealed and "The Mines Act" Chapter 27, Statutes of Manitoba 1930 came into force on July 15th simultaneously with the transfer of the natural resources to Manitoba. This Act provided for the establishment of the Mines Branch charged under the Minister of Mines and Natural Resources with the management and administration of mines and minerals

and the carrying out of the provisions of the Act.

Power granted to the Lieutenant-Governor-in-Council included the making of regulations and orders for:

(a) the leasing of lands containing minerals:

(b) prescribing the land subject to staking as minerals claims, quarrying locations, petroleum, coal, gas, or salt.

The Act provided for the appointment of arbitrators to settle any dispute between the holders of mineral locations and the owners of the surface rights of such locations. A Mining Board composed of the mining recorder and resident engineer of a mining division was created to settle all difficulties between licensees which may arise under the Act. Provision was also made that any person affected by a decision of the Mining Board might appeal to a Judge of the Court of Queen's Bench. The Mines Act was amended by Chapter 25, Statutes of Manitoba 1933 providing that The Mining Board shall consist of "three members or such other number as, from time to time, the Lieutenant-Governor-in-Council determines......"

By Chapter 41, Statutes of Manitoba 1951, the sections of the Mines Acts dealing with right-of-entry were redrafted to cover the problems arising as a result of the drilling for oil. The

responsibility of arbitration, between the oil operator and surface owner where a disagreement arose over compensation, was vested in The Mining Board. Provision was made that the operator, "after giving all parties affected, seven clear days notice thereof, could apply to the board for permission to enter forthwith upon and use the surface------and the board may------grant the leave for which application is made upon the operator providing security sufficient in the opinion of the board, to protect all rights and privileges of the owner and occupant thereof------."

The Act provides (Section 25 (1) that the Board shall determine;

(a) what portion of the surface rights the operator requires for or incidental to the efficient and economical performance of his operations;

(b) the exact location thereof;

(c) the amount of the compensation that shall be payable and the person or persons to whom that compensation shall be paid;

(d) what portion of the surface rights of other lands the operator requires to gain access to the land on which his operations are being conducted; and

(e) such other conditions as the board deems necessary in connection with the granting of the right of entry.

The Act also provides (Section 25 (2) that in determining the compensation, the board may consider

(a) the value of the land for the purpose for which it is used by the owner of the surface rights irrespective of any enhancement thereof from the existence of minerals thereunder;

(b) the amount of land that may be permanently damaged by the operator's operations;

(c) the adverse effect of the right of entry on the remaining land;

(d) the compensation to be paid for severance;

(e) the compensation to be paid for the nuisance, inconvenience, and noise, that may be caused by, or arise from or in connection with, the operations; and

(f) such other factors as the board may from time to time deem proper, relevant, or applicable.

Chapter 41 Statutes of Manitoba 1951 also provided for the appointment by order of the Lieutenant-Governor-in-Council of The Oil and Natural Gas Conservation Board consisting of not more than five members. Initially, power was vested in The Board, by regulation, to make orders relative to production, salt water disposal, and other conservation matters. Such orders were subject to the approval of the Minister of Mines and Natural Resources. Subsequently (Chapter 45, Statutes

of Manitoba 1955), the sections of The Mines Act dealing with The Oil and Natural Gas Conservation Board were revised and power of The Board to make orders became part of the Act.

Section 59 (8) of the Act provides that

(8) Without restricting the generality of subsection (7) the board, with the approval of the minister, may make orders

(a) respecting the designation and delineation of areas within the province as fields and pools;

(b) respecting the designation of the area that shall be allocated to a well in connection with fixing allowable production;

(c) requiring the extraction of natural gasoline, other hydrocarbons, or other substances, from any gas produced where economically feasible;

(d) requiring the repressuring, recycling, or pressure maintenance, of any pool or portion thereof where it is economical so to do, and for that purpose where necessary requiring the introduction or injection into any pool or portion thereof of gas, air, water, or other substance;

(e) requiring the storage in any underground formation, in accordance with such terms and conditions as the board may prescribe, of any gas produced that is in excess of the reasonable market demand, where it is

economical so to do;

(f) requiring the disposal into an underground formation or otherwise, in accordance with such terms and conditions as the board may prescribe, of any water produced;

(g) providing for the control and regulation of the production of oil and gas by restriction, proration, or prohibition, for the purpose of giving each producer of oil or gas the opportunity of producing or receiving his just and equitable share of oil or gas in the pool.

Decisions of the Board are also subject to appeal by way of application to a Judge of the Court of Queen's Bench.

The 1955 revision of the Act also dealt with several matters which had previously been included in the regulations or for which no provision had been made.

Section 62 of the Act provides that the Lieutenant-Governor-in-Council may designate any purchaser or producer of oil or gas to be a common purchaser from a pool.

Section 63 provides that the Board may take possession of any well to enforce any order "for the purpose of preventing damage to an oil or gas producing formation, or to remove an undue hazard to life, property, or natural resources."

Part III of the Act, Sections 64 to 69 inclusive deals with "Unit Operations" and provides that the Lieutenant-Governor-in-Council may authorize participation by the Crown in a unit operation.

4. Regulations: After the transfer of the natural resources in 1930, oil and natural gas in addition to coal, oil shale, and salt were administered under the Boring Regulations which provided for an application fee of $5.00 and an annual rental of .10¢ per acre.

The minimum area of a Boring Permit was one quarter section and no person was permitted to stake out or apply for, except by assignment, an area greater than 1920 acres nor more than three separate and distinct locations in any one license year.

The applicant for a Bording Permit had to be in possession of a Miner's License.

Upon the holder of a permit proving to the satisfaction of the Minister that he had discovered coal, natural gas, oil, oil shale, petroleum or salt or any one or more of such substances in commercial quantities upon or under the land included therein, the Minister could direct the issue of a lease to the permittee of the claim.

The rental of such lease was $1.00 per acre per annum, payable in advance.

The term of the lease was 21 years subject

to renewal for a further period of 21 years provided evidence was furnished to the Minister to show that during the term of the lease the lessee had complied fully with the conditions of such lease and of the Regulations.

Royalty on sales of products was fixed by Order-in-Council to be collected in such manner as might be specified by the Minister.

The first provincial regulations dealing exclusively with oil and natural gas were adopted in 1947 and provided for the disposal of such rights by

(a) Leasing

(b) Geological and Geophysical Reservations

(c) Drilling Reservations

(d) Geophysical and Geological exploration

(e) Drilling and production operations.

Minor amendments to the above regulations were made in 1951, 1952, 1953, 1955, 1956 and 1957, but these amendments did not change the basic terms governing the disposition of oil and natural gas rights. The regulations under "The Mines Act" have been filed with this brief. A short summary follows:

Disposition of Oil and Natural Gas Rights.

Term: Leases are granted for a three year primary term and a six year secondary, subject to renewal for successive periods of six years each

provided the Minister is satisfied that the productive life of the lease is longer than the original term of the lease.

Rental: Rental for the primary term is 50¢ per acre or fraction thereof and for the secondary term $1.50 per acre or fraction thereof provided, however, if commercial production is obtained the annual rental shall be 50¢ per acre, but in no case shall the annual rental be less than $1.00 for any one lease.

Renewal: Where production is obtained and the Minister is satisfied that the productive life of the lease is longer than the term of the lease, he may renew the lease for successive periods of six years. If production is not obtained during the term of the lease the Minister may, in his direction, renew the lease for successive periods of six years at an annual rental of $1.00 per acre or fraction thereof.

Area: The area included in an oil and natural gas lease shall not exceed three sections or 1,920 acres and shall not be less than a quarter section of 160 acres, where available, and no person except by assignment, may acquire in any calendar year more than 9,600 acres excepting also where leases are obtained through geological and geophysical reservation.

Tracts Surveyed and Unsurveyed:

Tracts applied for, shall:

(a) where situate is surveyed territory consist of sections and legal sub-divisions of sections,

(b) is unsurveyed territory be rectangular unless the boundary of a previously located tract is adopted as a common boundary and shall be staked along its greatest disension and the length must not exceed twice the breadth.

Installation of Machinery: Within one year from date of lease or such time as the director may order, the lessee shall have installed upon the lands described in his lease, suitable machinery for carrying on drilling operations and shall immediately upon the installation of such machinery proceed with drilling operations.

Offset Drilling: Where oil in paying quantities is discovered on lands adjacent to any leasehold and where in the opinion of the director the producing of such oil may draw the adjacent land, the director may order the lessee to commence drilling operations on his leasehold to offset the producing well.

Grouping: For the purpose of operation, a lessee, who has acquired two or more oil and natural gas leases may consolidate or group those portions of such leases as are situate with a radius of twenty-five miles from the well side.

The maximum area which may be included

in a consolidation or group shall not exceed thirty sections or 19,200 acres, however, where a lessee suspends operations for more than six months without consent of a director such suspension shall terminate the consolidation or group.

Establishment of Credit: A credit may be established in favor of a lessee for his expenditures in drilling and in geological and geophysical exploratory operations, such credit to include a fair allowance for depreciation of machinery, but shall not include cost of machinery, casing used or any other extraneous expenses.

Credit in Payment of Rental: 75 per cent of the established credit of a lessee may, in the discretion of the director, be used by the lessee for a period not in excess of three years from its establishment, to satisfy the rental on any oil and natural gas lease in the name of the lessee within a radius of twenty-five miles of the well site, exclusive of each 160 acre area on which the presence of oil has been determined. The maximum area, the rental of which may be satisfied from established credit, is 35,000 acres.

Contributory Credit: Where a lessee contributes to the cost of drilling a well in unproven territory, a portion of the credit so established may with the consent of the director be established in favor of the contributor in the ratio

which his contribution bears to the expenditure incurred in the drilling of the well. Such credit may be used by the contributor to satisfy the rentals due on any lease standing in his name of which he is the sole beneficial owner and having a portion thereof within five miles from the well site.

Rights Acquired by Lease: A lease conveys to the lessee the right to oil, and natural gas, which may be obtained from the leasehold by usual process of drilling, but does not convey the oil shale rights or the oil which may be recovered from shale by process of extraction.

Surface Entry: Where surface rights are vested in some person other than the lessee, the lessee shall not enter upon the lands unless and until an agreement is made with the holder of the surface rights or the provisions of the Act providing for arbitration have been complied with.

Assignment of Lease: The lessee shall not assign, transfer or sublet any of the rights described in the lease without the written consent of the Minister or of an official of the Department designated by the Minister and such transfer shall be unconditional.

Royalty: The royalty levied and collected by the Crown on all products of any location acquired under these regulations or under any regulations made by the Dominion of Canada prior to July, 1930,

shall be:

(a) On all products other than natural gas, including all products obtained by separation, absorption, or any other manner, twelve and one-half per centum thereof if free and clear of any deduction whatsoever and where any products of a location, other than natural gas, are sold, until otherwise ordered by the Minister such sale shall include the royalty share of such products belonging to the Crown, and the moneys received from the sale of such royalty share, shall be forwarded to the Mines Branch with the monthly return, and:

(b) On natural gas consumed for some useful purpose or sold, twelve and one-half percentum of the selling price or if consumed off the location twelve and a half percentum of the fair value, provided that in no event shall the royalty be less than one-quarter of one cent per thousand cubic feet of natural gas.

A company or corporation desiring to acquire a lease, shall be licensed and registered under the Laws of Manitoba.

Geological and Geophysical Reservations: Sections 44 to 63 inclusive of the regulations provide, generally, that, subject to the approval of the director, tracts of land may be reserved to applicants for the purpose of carrying on geological and/or geophysical examination, including any

investigation relating to subsurface geology providing satisfactory representations are made that the prospecting programme is such that the information to be obtained will be of value.

Drilling Reservations: Sections 64 to 89 on the regulations provide, generally, subject to the approval of the director, tracts of Lands may be reserved to applicants for the purpose of carrying on investigation of the subsurface geology, by methods used in drilling wells for the production of oil and natural gas, provided satisfactory representations are made that the prospecting programme to be undertaken is such that information to be obtained will be of value.

Geological and Geophysical Exploration: Sections 91 to 106 inclusive relate to the licensing and regulations pertaining to this subject. These regulations provide for the issuance of licenses, renewals, the submission of detailed reports on expenditures incurred, data on the subsurface explored, cores, samples and so on. Subject to the approval of the Minister of Public Works with regard to trunk highways, and the Municipal Commissioner in regard to other roads, the director (of the Mines Branch) may grant licenses to enter upon and use public road allowances for the purpose of drilling shallow holes for seismograph, surveying and structural mapping with standard light portable drills.

Drilling and Production Operations: Part IV of the Regulations under The Mines Act for the Exploration, Development and Production of Oil and Natural Gas in Manitoba applies to every well in the Province which is:

(a) being drilled for the purpose of searching for or obtaining oil and natural gas; or

(b) producing or capable of producing any oil and natural gas; or

(c) drilled to a depth of more than five hundred feet regardless of the purpose for which it is being drilled.

Licensing of Wells: Section 107 to 111 inclusive of Part IV of the Regulations under The Mines Act relate to the licensing of wells. No well may be drilled without a licence issued by the Director of Mines, and application for a licence to drill a well may be made only by a person or company entitled to the oil and natural gas. If the well is to be drilled for some other purpose, the applicant must have the right to drill such a well. Application for a licence to drill a well must be made to the Chief Mining Recorder, accompanied by a fee of $25.00 payable to the Provincial Treasurer, and the licence issued by the Director of Mines.

The proposed well location must have been surveyed by a competent surveyor or engineer

and plans of the survey, endorsed by the applicant and the surveyor, must be submitted with the application. The survey plan must show the proposed well site in relation to an established land survey monument and the boundaries of the spacing unit in which it lies. It must also show rights of way, buildings, rivers, lakes, existing wells and distance to wells on offset leases.

A well may not be drilled within 330 feet of any right of way, dwelling, school or church unless the Director of Mines considers such a condition justified. Drilling in the proximity of a coal mine would be permitted only after the Director of Mines is satisfied that reasonable precautions have been undertaken to protect any mining and the oil operation from harm.

Before a licence for a well is issued, the applicant must have deposited with the Provincial Treasurer, a performance bond not in excess of $2,000 for a well to be drilled less than 1,000 feet in depth and not in excess of $5,000 for a well to be drilled in excess of 1,000 feet in depth. This deposit is refundable only after the well has been placed on production or abandoned to the satisfaction of the Director of Mines.

A well licence may be cancelled or suspended by the Director of Mines for a contravention of these Regulations or when drilling has

not been commenced within 90 days from the date the licence was issued.

The normal well spacing is one legal sub-division in surveyed territory and 40 acres in unsurveyed territory.

To obtain a production allowable based on the area of the spacing unit, the well must be completed within its target area. In the case of a one legal sub-division spacing unit, the target area is the central ten acres with a side dimension of 660 feet. If a well is completed outside its target area, the area from which the production allowable is based will be an area less than the spacing unit and determined in accordance with Section 212 of the Regulations.

Testing of Wells: Certain basic information is required by the Director of Mines on all wells drilled in the Province. Among other data, the Director of Mines requires that

(a) rock cuttings and cores, as specified by the Director of Mines, be taken on every well drilled;

(b) electric logs or other suitable logs be run on every well drilled when ordered by the Director of Mines;

(c) tests at 500-foot intervals be run on all wells being drilled to determine the amount the hole deviates from the vertical;

(d) fluid samples from drill stem test recoveries on wildcat wells be taken and submitted to the Director of Mines.

Approval of the Director of Mines is required where a group of wells are operated as a battery and the individual wells are not produced into separate storage facilities and the produced fluids are commingled before measurement and each well must be individually tested at intervals.

A representative sample of oil, gas and water is obtained from every oil pool and analyses secured.

Most companies do more testing and analyses than the Director of Mines requires and copies of such additional information are made available to the Director of Mines.

Well Records: The Mines Branch keeps records and statistics on all aspects of the licensing, drilling and production activity for all wells drilled in the Province.

THE PIPE LINE ACT. The Pipe Line Act is under the administration of the Department of Mines and Natural Resources and governs the construction and operation of oil pipe lines contained wholly within the province but does not include pipe lines from a well to a separator or to a tank or tank batteries, nor gas pipe lines.

Crude oil pipe lines are those constructed

or being constructed for the transmission of oil from the various oil fields to interprovincial pipe lines or from interprovincial pipe lines to refineries.

Before construction can be commenced, an application must be made to the Minister of Mines and Natural Resources indicating the proposed route and giving specifications of the pipe etc., copies of the application and plans are also filed with the Minister of Public Works. Before granting a construction permit the Minister considers any recommentions of the Minister of Public Works.

If the permittee is unable to acquire the interest in the land required for the pipe line by contract with the land owner he may obtain an order of the Court of Queen's Bench made under The Manitoba Expropriation Act and this Act.

On completion of the pipe line, the permittee makes an application to the Minister of Mines and Natural Resources for an operating licence to operate the pipe line after having filed in the appropriate land titles office a plan of the right of way of the pipe line.

Section 23 provides that the Lieutenant-Governor-in-Council may make an order exempting a pipe line or parts of a pipe line, not exceeding in any one case ten miles in length from certain provisions of The Pipe Line Act.

Section 24 requires approval of the Minister for alterations, additions or extensions to any pipe line.

Conditions for construction of pipe lines carrying water required for operations conducted in fields for secondary recovery, water injection or disposal schemes are dealt with under the Act in the same manner as oil pipe lines.

Section 22 provides for a pipe line to be declared a public carrier by application to the Minister of Mines and Natural Resources and the Lieutenant-Governor-in-Council may make an order declaring the pipe line to be a public carrier and subject to the provisions of The Municipal and Public Utility Board Act applicable to a public utility.

The Mineral Taxation Act: The Mineral Taxation Act, Chapter 19, Statutes of Manitoba, 1954 applies to crude petroleum oil rights held in fee simple in the Province and provides for the assessment and levying of a tax on crude petroleum oil in producing areas at the rate of 8 mills on each dollar of assessed value. The value is computed in accordance with the following schedule:

"1. The fair actual value for the purpose of assessment in any year of the crude petroleum oil in, on, or under, the land or included in the unit of minerals, allocated by the Minister

to a well producing crude petroleum oil, shall be one and one-half times the value at the average field price during the first three months of the year in which the assessment is made, of all crude petroleum oil produced from the well during the next preceding year.

2. Where a well has produced crude petroleum oil for part only of the next preceding year the production of crude petroleum oil for the next preceding year shall be deemed to be the amount which the well would have produced had it been producing for the full year at the same rate as it produced during the part of the year it was in production."

Where the owner of the freehold mineral rights has granted a lease, it is customary for the lessee to reimburse the mineral owner for seven-eighths of the producing area tax. The only mineral in Manitoba affected by the producing area tax is oil.

The Act provides that after an assessment has been made, the assessment roll be posted in specified places in the producing districts and in Winnipeg. Any owner whose minerals have been assessed has the opportunity to appeal to the Municipal Assessment Equalization and Appeal Board.

	Producing Area Mineral Tax
1954-1955	$45,800
1955-1956	64,390
1956-1957	118,334
1957-1958	162,328
	$390,852

The tax for the fiscal year 1957-1958 averaged 3.41 cents for each barrel of oil produced from freehold mineral rights.

The Oil and Natural Gas Conservation Board: The Board regulates the rate of production of all oil wells in Manitoba and seeks to do so on the basis of sound engineering and economic practices and with the intent of preventing waste, conserving oil resources, and maintaining equity.

Maximum Permissible Rates: During 1951 the Board adopted the Alberta MPR formula on a pool basis. The M.P.R. of wells in a pool is based on the estimated recoverable reserves of the pool and the rate at which these reserves may be recovered through the average well without damage to the pool or waste of reservoir energy.

The following M.P.R. orders are in effect:

Maximum Permissible Rates

	Field	Allowable B.O.P.D.	Effective Date
13A	Daly	75	March 1, 1955
14A	North Virden Scallion	70	June 1, 1955
16A	Woodnorth	45	June 1, 1955
19A	Ebor	35	December 1, 1955
22A	Virden-Roselea	60	December 1, 1955
25A	Maples	34	June 1, 1956

Maximum Permissible Rates: Continued

	Field	Allowable B.O.P.D.	Effective Date
26A	Pierson	37	June 1, 1956
27A	Routledge	60	June 1, 1956
28A	Tilston	36	June 1, 1956
29A	West Butler	85	June 1, 1956
30A	Whitewater	35	June 1, 1956
31A	Other Areas & New Fields	50	March 1, 1958
32A	Kirkella	60	April 1, 1958
33A	West Routledge	60	April 1, 1958.

Field Areas:

Certain areas in the province containing oil pools have been declared as fields and the following Field Orders are in effect:

	Field	Effective Date
5F	Whitewater	April 2, 1954
8F	Pierson	October 22, 1954
9F	Woodnorth	October 22, 1954
12F	Ebor	March 1, 1955
16F	Tilston	August 1, 1955
22F	West Butler	May 1, 1956
27F	Daly	April 1, 1957
28F	Maples	April 1, 1957
30F	Virden-Roselea	April 1, 1957
32F	Routledge	August 1, 1957
33F	North Virden Scallion	January 1, 1958
34F	Kirkella	March 1, 1958
35F	Lulu Lake Cancellation	March 1, 1958
36F	West Routledge	March 1, 1958

Salt Water Disposal: Early in the development of the oil fields production of salt water with the oil became a serious problem shown by the following table:

	Oil Produced (bbls.)	Salt Water Produced (bbls.)	Salt Water Injected (bbls.)
1955	4,145,757	1,789,445	981,867
1956	5,786,540	3,990,598	3,741,865
1957	6,089,743	6,279,926	6,042,525

To control the disposal of this salt

water the following board orders are in effect:

1 SWD - requires that the operator submit a plan of salt water disposal to the Board within three months of a well going on production.

2 SWD - deleniates a restricted area in and around the Town of Virden within which no surface disposal of oil field wastes is permitted.

4 SWD - provides for surface pit disposal under permit, disposal underground or quantities in excess of 100 barrels per month per battery and prohibits spillage on the surface or into any body of water.

Well Testing:

2 WT - provides for test production of not more than 1,250 barrels during the first five days well in on production.

4 WT - provides for a further 5-day test period, upon application, after a major reconditioning of a well.

Well Casing:

2 C - provides for surface casing to be set 100 feet below base of glacial drift with a minimum depth of 300 feet below surface and cement returns.

General Order G_2 allows for underproduction of oil to be carried forward and limits cumulative overproduction of wells to less than 10 percent of the monthly allowable.

General Order G_3 qualifies Order No. G_2 so as not to include wells shut down by Board Order.

Field Inspections: In order to keep in touch with the widespread oil development in the province a field office has been established in the Government Resources Building at Virden. This office is in charge of a District Petroleum Engineer and the establishment provides for 3 Petroleum Engineers, 1 Field Engineer, 1 Field Technician, 1 Laboratory Assistant and 1 Clerk Stenographer.

The field staff by frequent inspections of drilling operations, wells and production equipment determine if the Board requirements are being complied with.

Well abandonments are witnessed and the lease examined to see that the land surface has been cleaned up and levelled.

In addition the field staff collects and processes a large amount of information on drilling and completion of wells which is forwarded to the Winnipeg office.

MR. MOFFAT: PART E. INTERNATIONAL AND INTERREGIONAL MOVEMENTS OF ENERGY. Movements of fuel between one region and another either across provincial boundaries or across the international boundary are of great significance to Manitoba. Our limited local energy sources form a

small part of total energy consumption in this province. For this reason we have been vitally interested in the supply of fuels from Alberta and Saskatchewan which were traditionally a large source of coal and have now become relatively an even larger source of oil and gas for Manitoba.

It was this situation which caused Manitoba to take an early interest in the policies of the Alberta Government with respect to the release of oil and gas for shipment eastward. In 1949, the Manitoba Government made a submission to the Petroleum and Natural Gas Conservation Board of the Province of Alberta. That brief outlined in a general way the proposition that natural gas alone rarely determines the location of an industrial plant, but that the availability of gas coupled with other circumstances can be a very important element in industrial development. The essential point made at that time and continued ever since is that Manitoba wants gas available at the minimum economic rate. Possibly the most important consequence of the availability of abundant supplies of natural gas will be the stabilizing influence on the price structure of fuels in general. For these reasons Manitoba, as a matter of broad general attitude, has favored a relatively unrestricted movement of energy raw materials across provincial and international boundaries.

On the question of exports of energy in any of its forms we have an open mind. As stated at several points in this brief our primary concern is that Manitoba should be assured of adequate supplies of the various fuels at reasonable prices. We are not in a position to judge the adequacy of the reserves which are available, but if the federal authorities are satisfied that the reserves are sufficient to assure supplies for the foreseeable future then we are not opposed to exports. But we do feel that exports should not take place at prices which in effect call upon consumers in Canada to subsidize consumers in the United States. Without discussing the full details of pricing arrangements which might arise we wish to go on record that any export contract using pipeline or other facilities which are also used for sales in Canada should not be approved unless it can be demonstrated that the prices and pipeline charges on the export contract are high enough that they cover the costs of the item exported and make some reasonable contribution to the overhead costs of the industry and the transportation agencies involved. We feel that this aspect of all export contracts should be open to investigation by whatever agency has responsibility for approving transportation charges within Canada. This protection is especially necessary when the contract is one covering a long

term of years or one involving Canadian and American companies with corporate, financial or personal ties.

On the question of imports of petroleum and its products we hold strong opinions. We of Manitoba are opposed in principle to any suggestion that imports of oil to Canada should be restricted by higher tariffs, or by quotas or by any other means. For many years Manitoba paid high prices for our petroleum products on the argument that because of our location we must pay the world price plus the cost of transporting the crude to the main refining centres in the east and product transportation charges from there to Manitoba. Following the discovery of crude oil in the Canadian Prairies prices in Manitoba for petroleum products fell into line with the new sources of supply and we began to receive the benefits of a price related to the world price for crude. When world prices meant high prices in Manitoba we paid world prices. Now that world prices seem to mean lower prices we will object if government action is taken to keep our prices above the level they would otherwise reach.

PART F. PUBLIC SUPERVISION.

The facts of geography locate Manitoba at a midpoint on the large pipeline projects which move oil and gas from Western Canada to Eastern Canada and Eastern or Central United States. This position

is fundamental to the attitude of Manitoba residents toward such projects both those which are already in operation and those which are being discussed for the future.

As mentioned earlier in this brief Manitoba is now producing slightly less than one-half of the amount of crude oil needed to supply Manitoba's demand for refined products. This crude petroleum is sold at a price which reflects the lower cost of transporting Manitoba crude to eastern markets and consequently, the well-head price is slightly above the well-head price for oil of comparable quality in fields located farther west. This favorable location affords Manitoba producers some advantage over producers in the provinces to the west and this seems to be assured so long as consumption in Manitoba and adjacent areas is sufficient to absorb quantities considerably larger than Manitoba's production of crude. Even if Manitoba should become a substantial net exporter of crude petroleum its favorable transportation position would remain.

Consequently, Manitoba's primary concern is that the great pipeline systems return to Manitoba producers a figure which properly reflects their geographic position and charge Manitoba consumers a price which does not ask them to bear an unfair share of the total cost of producing and transporting oil and gas.

Before making any comment with respect to the regulation of pipelines it may be advisable to recall the difference between oil pipelines and gas pipelines. The basic difference is that gas pipeline companies buy the gas at or near the well-head and sell it to franchised distributors using long term contracts at both ends of the transaction. In contrast oil pipeline companies operate as carriers of crude oil owned by the producers and their charges are calculated as so much per barrel for transportation and the arrangement is buttressed by through-put guarantees to assure long run loads. Looked at from the viewpoint of the consumer receiving the product from the line, however, the result is the same. He must pay the wellhead price plus the transportation charge. In one case however, this is a single price. In the other case it is two prices which must be added together.

The Government of Manitoba is convinced that both types of operation should be subject to public scrutiny, from time to time. If that is not done it would be possible for a situation to develop under which persons located, as in Manitoba, at mid-points on the pipeline would be charged prices or rates which were excessive as compared to those charged at other points along the same pipeline. Manitoba's fundamental concern on transportation issues is here expressed. Located as we are, far from water

transport, we have always felt the need of public authority to supervise the rates sought by the railways. Even under public regulation of railway rates we have seen tariffs established which charged rates from Toronto to Winnipeg higher than rates for the same commodity from Toronto to Vancouver. That situation has now been rectified due to action through the Board of Transport Commissioners. But we are not prepared to run the risk that at some time in the future rates for Alberta gas in Winnipeg will be out of line as compared to the rates for the longer movements to Montreal or Toronto.

Manitoba, therefore, endorses the proposition that there should be some arrangement whereby the public of Canada could appeal to a Federal Authority for a review of rates charged by oil or gas pipelines. At the present time oil pipelines are covered by the Federal Pipe Lines Act which provides that in the case of any pipeline for the transportation of oil, the Board of Transport Commissioners may declare it to be a common carrier. If that has been done then the Board of Transport Commissioners can make orders and regulations with respect to tolls or tariffs and the pipeline company is bound by the Tariffs filed. The Act then sets out certain powers and principles which in effect prohibit discrimination as between different

companies using the pipeline and allow the Board of Transport Commissioners to change or cancel tariffs from time to time. The essence of these provisions is that the Board can declare an oil pipeline to be a common carrier and if that is done tariffs must be filed and the tolls must be "just and reasonable" and must be equal as between different users of the same service.

Up to the present no oil pipeline company has been declared a common carrier and hence no tariffs have been formally approved although tariffs are being issued so that information is available as to the rates charged.

In the case of gas pipelines there are no similar provisions in present Federal Legislation. In this case the Federal authorities are merely required to approve the location and safety features of the proposed pipeline and certain aspects of its financing. The result is that no public authority is in a position to hear and deal with any appeal from any part of the country which feels it is being called upon to pay an unreasonable share of the cost of transporting gas.

We are not in a position in this brief to analyze the price structure established by Trans Canada Pipelines to determine whether the prices in Manitoba are reasonably related to the prices in other zones.

But as a matter of principle we assert that these prices should be matter of public record and should be subject to public scrutiny from time to time.

We use the phrase "from time to time" to emphasize the periodic nature of the scrutiny which we envisage. It is not our view that this function need be carried out by a large and permanent organization devoting its whole attention to this subject. Neither is it our view that the body which performs this function should be responsible for a thorough and complete regulatory structure involving close supervision of all rates and charges and the fixing of all tariffs by public authority. Rather we look to a body which would exercise this Federal jurisdiction with great tact and discretion and it is our view that the powers should be permissive and not mandatory. In other words, the authority should confine itself largely to investigation of the facts. Regulations should not be made unless absolutely necessary in the public interest.
For such a system to work, however, it would be necessary for the regulatory body to have clear authority to act strongly and decisively if the circumstances should warrant it. If it should become necessary for the public authority to intervene, the first action might be in regard to the overall level of earnings and only at a later stage might

attention be directed to rates and charges.

Local distribution systems and local gathering systems confined to services within one province should, at all times, continue to be the responsibility of the province concerned. We feel that if the Federal authority should deal with the distribution of gas, for example, it would find it very difficult to adjust nation-wide practices to the needs and wishes of the local communities. On the other hand each province and area could establish whatever administrative machinery seemed appropriate to its own needs and could integrate this with other practices already in effect with respect to utilities and related matters.

Similarly the development of gathering systems is a matter in which local knowledge and local responsibility must remain paramount. We note that in both Saskatchewan and Alberta the provincial governments have expressed strong views to the effect that gathering systems should be provincially controlled. We of Manitoba, have as yet, failed to locate gas in volumes sufficient to justify such plans but we are sure that if our hopes are realized and gas is discovered in Manitoba in substantial volume then we also would insist that provincial authority should deal with the subject and that no federal jurisdiction should be involved. In the case of oil we already have a gathering system in operation under provincial jurisdiction and we would

Your terms of reference appear to call for specific discussion of the proposition that a National Energy Board should be set up to deal with all aspects of energy, its production, transport, consumption or export. Obviously any Board with such wide powers would take over many functions which are now handled directly by the Federal Government either through Parliament or by cabinet decision.

The Manitoba government is of the view that many of these issues are of such great moment that they should not be separated from the direct control and responsibility of those who are elected to form our Federal Government. If, for convenience, the day by day administration is delegated it should remain clear that final responsibility is on the Federal Government and not on some Board which is not responsible to the whole country.

On the other hand, there are certain functions where policies and practices in respect to energy must be determined in the light of experience in other parts of the Canadian economy. We refer here to questions of safety, rights of way, and pipeline charges. Each of these has close relationships to the same aspects of other transportation agencies. For such subjects existing agencies may be the most appropriate authority, although in these also, responsibility should be closely tied to the elected government. The Manitoba

Government is of the opinion that the Federal Authorities who are responsible for these matters are in the best position to evaluate the alternative administrative arrangements and to choose between them, but it should not be overlooked, that if a new and elaborate administrative Board is created it would almost inevitably expand its functions and its staff until the problem would be to co-ordinate its activities with the other aspects of government policy.

From time to time special situations may require investigation and the Federal Government may feel the need of a searching inquiry by a group of persons assigned to that specific job. Such investigations are well conducted by short term commissions such as you hold, rather than by permanent commissions which suffer the disadvantages mentioned above.

PART G. CONCLUSION. This brief has given in some detail the story of Manitoba's consumption, production and administration of energy and its raw materials. It has also expressed opinions on a number of points upon which you will be recommending national policy for the future. The points which have been dealt with in this way are those which we consider fundamental to the inquiry laid out by your terms of reference. We cannot, however, conclude this submission without

referring to the subject of energy policy in an even broader context.

Fundamental to all energy development is the question of financing and control of the large capital projects which are inevitably involved. We have noted that during recent years and months there seems to be an increasing tendency for the Federal Government to pay part of the cost of projects serving a particular region of Canada and having power generation or energy supply as an important end result. We refer for example to the St. Lawrence Seaway, the assistance to a hydro-electric plant in New Brunswick, subventions of various sorts for the movement of coal, the South Saskatchewan project and the Trans-Canada gas pipeline project. Many of these projects are of great national benefit and we mention them here as examples only and in no sense of criticism. But when federal participation in such projects is decided upon it is important that they be approached from the viewpoint of the national interest and within the framework of policies which are applicable over the whole nation.

Large and costly projects of this type must, of course, be arranged to conform to their own unique circumstances and it would be completely impractical to say that no federal assistance would be provided unless similar projects were

undertaken in all parts of Canada. But special efforts should be made to select for federal participation, schemes which could be advantageously applied in many sections of the country. It is in this context that we have on several occasions raised the matter of federal assistance on the capital cost of power transmission lines because this is a type of capital investment, which is required in increasing amounts in all sectors of Canada. Other examples could, no doubt, be developed and investigation might well be undertaken to determine their practicability. The important point is to make sure that federal assistance on these large capital projects should not be simply a series of uncoordinated separate undertakings from which benefits may be concentrated in a few areas and for which costs may be charged against tax-payers over the whole country. We sincerely hope that in your report you will urge that federal participation in such projects take a nationwide view and should be either limited to projects of such magnitude as to be truly national in scope or extended to all parts of Canada on a policy which is available equitably to residents of all parts of Canada.

This outline of Manitoba's concern with respect to national energy policies concludes on the same note on which it began. Much of the history

of Manitoba can be expressed in the efforts of our people to provide themselves with transportation to bring in supplies and to move out products and with sources of heat energy to provide warmth and light. Much of the future of Manitoba will be determined by our success in meeting not only these same two needs adequately and at reasonable cost, but in meeting our vastly increased requirements for all sources of energy to serve an expanded and diversified economy.

THE CHAIRMAN: Mr. Patterson, would you rather proceed or adjourn for lunch?

MR. PATTERSON: I think, Mr. Chairman, it would be more satisfactory to proceed after lunch.

THE CHAIRMAN: Gentlemen, we will adjourn now until two o'clock.

---Whereupon the hearing adjourned at 12.15 p.m., until 2.00 p.m.

---On resuming at 2.00 p.m.

THE CHAIRMAN: The Commission will now resume its hearings.

MR. PATTERSON: Thank you, Mr. Chairman. In developing the questioning on the Manitoba brief it is my intention to deal with the matter under several headings and I would like to start by reviewing some of the development matters; then I would like to review the suggestions made with respect to the national transmission policy, the question of Manitoba's position as a consumer and its effects or the effects of its thinking on markets for Canadian oil and gas and then turn to the questions of controls in the National Energy Board. I will not address my questions to a particular person, if you would simply select one of your number to answer the question and if you would like to go into a huddle, that will be fine.

Now, if you will turn for a moment to page 18 -- the map following page 18, you mention that the position of the Manitoba government was different from that of the Alberta and Saskatchewan governments in thatyou own only 17 per cent of the underwrites in the province. Now, could you clear up for me with reference to the geological map whether or not that 17 per cent figure is a figure taking into account the total area of the province or whether it relates solely to the areas which are

part of the Western Canadian sedimentary base?

MR. COWAN: It relates only to the part of the province which is considered to be in the sedimentary basin. There are three-fifths of the province that is in the Precambrian shield.

MR. PATTERSON: So in making up the 17 per cent figure you disregard entirely that area?

MR. COWAN: Yes.

MR. PATTERSON: In connection with the development in Manitoba you mention the interest in the prospects in the Ordovician and Silurian forms as a result of activities to the south; areyou in a position to assess or tell us something of what government geologists think as to the likelihood of developments of those forms in this province and the extent to which any interest is presently being shown.

MR. COWAN: That would be a pretty technical matter and I would ask Mr. Gobert to answer.

MR. GOBERT: Well, for the purposes of the record, to date we have not found any indications of oil. There have been a few traces in the Ordovician and Silurian, however, there are reservoirs there and unfortunately all we have found to date are filled with salt water but the rock is there and the possibilities are there. I must repeat, to date other than traces of dead oil there have been no traces of oil in the Manitoba areas of

the Silurian and Ordovician.

MR. COMMISSIONER HARDY: Before we leave that, perhaps Mr. Gobert could tell us; I take it this area up around Churchill is in the same category?

MR. GOBERT: That is right. As a matter of fact, in the brief I think we state we know absolutely nothing about that area; we have had no drilling whatsoever in that area.

MR. PATTERSON: At page 65 in your explanation of Manitoba Legislation you mention the term of the leases as being granted for three years, a three-year primary term and a six-year secondary term. It would be interesting if you could give us the reasoning behind that form of the leases as distinct from the form of leases that we have been advised about in Saskatchewan and Alberta.

MR. COWAN: We use that form for a very definite purpose; the rental during the first three years is 50 cents an acre and for the last six years is $1.50 an acre unless in the meantime they obtain production. In other words, there is a penalty in the rental if they do not drill; if they drill and find oil it reverts during the secondary period to the 50 cents per acre. It is simply an inducement or there is a penalty if they do not drill.

MR. PATTERSON: That was designed as an

inducement to drill?

MR. COWAN: That is right.

MR. PATTERSON: Are there any other major differences between the disposition of oil and natural gas rights in Manitoba as compared to the other two provinces the Commission has heard about?

MR. COWAN: Well, as a further inducement we have established certain credits which the companies can earn where they spend money in exploration, drilling and so on, a part of that money can be applied as a credit if, as and when they come to lease. That has been quite an inducement in our opinion to companies coming in here and carrying on exploration.

MR. PATTERSON: Would you feel, then, that the drop in drilling activity in Manitoba in recent years shown in Figure 1 following page 28, is due to the difficulties of discoveries in Manitoba or the world or perhaps the Canadian general conditions or do you think it is peculiar to your own industrial situation?

MR. COWAN: Oh, I think it is due more to world conditions and marketing conditions. The fact is that most of the companies who are in Manitoba are also in Alberta and, to a certain extent, in Saskatchewan so that policy as far as Manitoba companies are concerned is dictated by a

head office in Calgary or Edmonton. I feel that the slacking off in drilling is due to that more than to local conditions.

MR. PATTERSON: Well, then, do you suggest that provision of markets for Saskatchewan and Alberta oil would in turn lead to an increasing development in the Province of Manitoba?

MR. COWAN: Well, that could happen.

MR. PATTERSON: It would seem to follow if they are having difficulty in Alberta and Saskatchewan, that dictates the development here?

MR. COWAN: Yes.

MR. PATTERSON: Now, information is given in regard to your MPR formula and I think the simplest reference is at page 33 wherein you set out the allowable barrels per day; can you tell me whether or not that is the actual rate of production of the wells or whether by reason of marketing the production is curtailed or if it is curtailed for some other reason, what that reason is?

MR. GOBERT: I think I can speak on that; the bottom of page 73, the allowables shown, barrels of oil per day is 75 in the Daly field. Very few of these wells can equal 75 and it is a formula, an allowable, based strictly on the formula and it is not a true indication of what those wells can do. In the case of the fields allowables in the order of 34, 35, 37 and so on, those allowables are

approximately what those wells will produce and do produce but I can say without fear of contradiction here that none of these wells are cut back on account of the market. As far as we know, we can sell every drop of oil that is being produced. While these allowables are based on formulas, on the larger size, on the smaller ones they are based on what the well can actually produce.

MR. COMMISSIONER BRITNELL: That is, you have none of these problems that plague such areas as Texas and Alberta of pro rationing?

MR. GOBERT: We feel we have problems in the province but we do not have that.

MR. PATTERSON: You mention on a number of occasions in the brief that on balance the Province would be self-supporting with respect to oil aside from the economics of a refining industry and you also mention the figures for exports of oil by the Province of Manitoba as given to the Commission by the Canadian Petroleum Association - - -

MR. KEYES: Mr. Patterson, I do not quite understand -- the self-supporting aspect if you are referring to our crude production, at the moment we are not self-supporting in terms of the current market. We are producing approximately 48 per cent in terms of the present day market.

MR. PATTERSON: That is the present day?

MR. KEYES: In terms of our crude production

in the province on balance we are producing at one-half of our provincial needs.

MR. MOFFAT: The refining production is approximately in line with our production but the crude production is about half.

MR. PATTERSON: Then we find that you have a sizable export shown on the C.P.A. figures which are quoted at page 15. We find the outlets are shown as 6 per cent for the Prairies; 43 per cent for Ontario and 51 per cent for the U.S.A. Is that due to problems arising out of the types of crude and the sulphur content that your refineries in Manitoba do not use local crudes?

MR. KEYES: I would think not, it is just the supply of oil through the pipeline. Saskatchewan and Manitoba oil has been introduced into the pipeline and moves on down into markets in Ontario and the United States.

MR. PATTERSON: Well then, is it fair to say that the sulphur content does not create an especially severe or serious difficulty for Manitoba crude on the market?

MR. MOFFAT: Well, the only aspect of the sulphur content that has been reflected into our price structure here is the one that was referred to, the discourt on the price where, I understand, it has been mixed into the rest of the crude and they take that depending on the price.

MR. PATTERSON: Have you knowledge of the types of marketing contracts in regard to the U.S. sales of Manitoba crude, whether they are short or long term?

MR. MOFFAT: No, we have no knowledge. This all comes back to the point that we as a government are not into the crude production the way the other provinces are.

MR. PATTERSON: I suppose the same would follow that you are not aware what large refineries are taking your crude in the United States?

MR. MOFFAT: As a matter of fact, we carefully quote the C.P.A. as the source of our figures.

MR. PATTERSON: Now, turning to this transmission question for a moment: you deal with the idea of electrical development in the northern part of this province and the fact that in the southern part the markets for electricity are not large enough to lend themselves to handling the cost of opening up those markets; then you carry on making this suggested plan for the Federal Government. In that connection, have you given consideration to the possibility that in regard to development of that resource if long-term contracts could be entered into either with extra-provincially or outside Canada, these long-term contracts would finance the transmission facilities much the same as I understand the pipeline is handled?

MR. KEYES: We specifically in this

proposal have not considered the long-term contract aspect but certainly it is bound to be in any such development that could arise from northern power that could not be supported in Canadian markets but specifically we have indicated an area of distribution here that we feel merits the consideration of the Commission.

MR. PATTERSON: What I am endeavouring to do is get your assistance as much as I can. Have you made a market survey in regard to the possibilities at all?

MR. KEYES: We have not in detail made an analysis of the market that would be available in the United States to take, shall we say, Nelson River power, if you are speaking specifically of the Manitoba case and we do not have detailed knowledge of the other areas in Canada to which we can refer. In the area to the south of us, however, there is a large demand for electrical energy the supply of which might at some time be a source of revenue for Canada.

MR. PATTERSON: I believe you have a survey being undertaken by Arthur Little?

MR.KEYES: That is right.

MR. PATTERSON: And does that deal with this hydro-electric power problem?

MR. MOFFAT: I am told that it will cover some aspects, not this particular part of it, but

it will deal with power to some extent but it is not yet done.

MR. PATTERSON: Will it deal with power sources, what there is as an economic survey of the producing ability of the area?

MR. MOFFAT: Yes, an economic survey of the whole of the area, not directly dealing with power.

MR. KEYES: May I interject here? We have in the Hydro-Electric Board had available to us some of the preliminary work which has been done by the Arthur Little Company on the development of power in northern Manitoba but the public data is not yet subject to distribution.

MR. PATTERSON: Well, in investigating or considering the matter raised by you it would be of assistance when that report becomes available if you could file a copy with the Commission.

MR. KEYES: We would be happy to do that at the time it is available. I might addthat our advisors have suggested that we might indicate to you that the preliminary information which has been made available to us by this organization is of such a nature that we feel in consideration of this proposal we have available to us the same source of data which the Arthur Little Company have worked on so that it should not detract in any way from the study which we have done in proposing this

preliminary look at the northern development.

MR. PATTERSON: Well, the reason I was interested was that I felt it would form a useful basis from which the Commission might be in a position to follow your reasoning in proposing this development -- a convenient summary of the situation.

MR. KEYES: Well, it really does not cover the same sort of things but it will be useful to you and we will be happy to let you have it.

MR. PATTERSON: Thank you. In connection with legislation you mention that the Lieutenant-Governor-in-Council has power to designate a purchaser or producer of oil to be a common purchaser. Has that power been used?

MR. COWAN: The power is there but it has never been used.

MR. PATTERSON: Has any pipeline in Manitoba been declared to be a public carrier?

MR. COWAN: No. There have been certain reductions but those reductions have been met either voluntarily or through negotiation between the company and the pipeline.

MR. PATTERSON: The government has not found it necessary ever to carry on conversations suggesting rates be reduced; industry has policed itself?

MR. COWAN: Yes.

MR. PATTERSON: Now, on page 2 you mention the substantial market for natural gas that is building up and you also mention, I believe, at page 54 that to a large extent the increase in use of petroleum in Manitoba is due to the large home heating market taken over by oil.

MR. COWAN: Yes.

MR. PATTERSON: Has any department of government in Manitoba made studies or projections for natural gas markets, taking into account the competition factor as between oil and gas and the problem it may create for your oil producers?

MR. MOFFAT: As you are aware, we are in the middle of a provincial commission dealing with the distribution of gas and they are to some extent working on that same subject. There have been several studies made by the companies, the potential distributors and submitted in that connection but to my knowledge nothing has been done like the equivalent to that.

MR. PATTERSON: And that commission, you mentioned part of its duties and am I correct in thinking part of its duties will be the question of stability of prices and so on to the Manitoba consumer?

MR. MOFFAT: On questions of distribution which fall within the provincial jurisdiction, I do not have the terms here but it is very broad

on the whole question.

MR. KEYES: I do not think we can say just what the Commission will come up with but its terms are very broad.

MR. PATTERSON: They have the same omnibus that we have. You mention Manitoba has entered the thermo power field and do you anticipate that generating stations are going to use coal and natural gas or how do you see the interplay of those two sources of fuel?

MR. KEYES: As the brief indicates the stations have been set up for what we term complete flexibility with very little adjustment in equipment; that is as between oil, gas and coal. What fuel will be used will depend upon price that is in existence at any point of time. I would rather suspect in the long run that gas, being a premium fuel, that over the whole life of a station we have considered coal would be best. Coal is presently being used.

MR. PATTERSON: One of the matters the Commission has heard about is that the use of natural gas for such things as thermo power plants is a rather bad thing for these premium fuels. What is your thinking in regard to that problem?

MR. KEYES: We will use the cheapest fuel we can lay our hands on at any particular point of time, whether it is gas, oil or coal and we have resigned ourselves to do that.

MR. PATTERSON: Would you feel that there should be anything done to prevent the competition of natural gas with oil in those fields or do you think it is better for you as consumers of those fuels that any regulation or control leaves the price free.

MR. KEYES: I would think we would want to have it free. But one always wonders with the properties which natural gas,has in terms of chemicals used down the road,whether this is the best effect. However with regard to a thermo-electric plant we are concerned with the price and the number of BTU's we can get for alternative fuel.

MR. PATTERSON: Now, on page 5 you express concern about the dangers of an interim report based on a partial examination of the whole field of energy, particularly if such report should result in disturbance of normal market relationships through subsidies, quotas or tariffs. I am interested in developing that with you: do you foresee that would be necessary to the development of the Canadian oil industry which we have been hearing so much about in the last two weeks?

MR. MOFFAT: I wonder if I could refer you to page 78 where the same thing appears, almost the same words, "tariffs, quotas and any other means". "We of Manitoba are opposed in principle to any suggestion that imports of oil

to Canada should be restricted by higher tariffs, or by quotas or by any other means". That is the same point made a little bit stronger than the first time.

MR. PATTERSON: Would you say that you are speaking from the consumers' point of view?

MR. MOFFAT: Well, we are speaking from the consumers' point of view and also from the point of view of the producing area which has some protections because of location anyway, and therefore it is primarily from the consumers' point of view. As we elaborate a little further on for a considerable period of time we were the consumers at the very end of the road paying the full transmission cost for everything and never got out of that rut. Now that we are out of it we do not want anything to take away some of the things which for so long we did not have.

MR. PATTERSON: Would you be concerned to the same extent if new markets for Canadian oil introduced Canadian oil to competition with lower world prices and reflected those lower prices back to the wellhead of Canadian producers?

MR. MOFFAT: Well, we in this area have been meeting world prices on everything. We have been producing and selling and having that philosophy all through our approach to trade problems we are prepared to go along the line on the import end as

well. We have taken a fairly consistent attitude that since we have to meet world prices on our shipping out, we want world prices on what is coming in.

MR. PATTERSON: In other words, if world over-supplies are put on long term, from the point of view of Manitoba you feel you should be in a position to buy on the world market and you should not be asked to protect the Canadian oil industry from that situation.

MR. MOFFAT: Well, we would not want to be pressed. Possibly at some stage it will get to where something must be done, but as a matter of general principle we take this position: with no protection in the long run we will get the dependable supplies at a reasonable price for the period. If you start developing it into short-term situations we won't follow the logical road to the end.

MR. PATTERSON: If the effect of your attitude became such that it was to stifle the Canadian industry, would you be prepared to reconsider?

MR. MOFFAT: That is one possibility and another possibility is some short-term dumping from foreign oils. Something would have to be done but this is our basic approach.

MR. PATTERSON: Did you have an opportunity to consider at all some of the suggestions that were

made to us that quotas could well be imposed in respect to importing but that the Canadian wellhead price of oil which is now based on Illinois rate at Sarnia could still be tied to that price? There would be no effect from quotas other than the enlarged markets. Do you think that theory has any merit or have you heard it and had a chance to consider it?

MR. MOFFAT: Well, I haven't heard it and we haven't discussed it in that form.

MR. GOBERT: Would you repeat that?

MR. PATTERSON: I will see if I can. As I understand it, some of the thinking that we got in Calgary in regard to this quota problem, the suggestion was that for Canadian oil to reach particularly the Manitoba market, quotas on imports would be necessary and in response to the problem of whether Canadian oil prices would then rise, the answer was that they are presently tied to an Illinois price; that they could still be tied to that price and still reflect changes in the way in which they do not.

MR. KEYES: I think I would say what Mr. Moffat said earlier when he was listening to you carefully; we have not considered it in those terms but one wonders if the imposition of import quotas could, in fact, persist and maintain a status quo in the pricing system that has existed over a long period of time.

MR. PATTERSON: To the extent that

Illinois prices are reflected -- let me put it to you this way, the extent to which Illinois prices are reflected in Sarnia is really through a very small amount of import, it is almost a fiction. Does that factor change your reasoning?

MR. MOFFAT: As long as the potential protection is there it still can make itself effective. Once you get a quota set-up it becomes an effective barrier and a breaker of the potential establishment and as soon as you get that break you cannot convince us that it will go on that way. Perhaps it will be that way theoretically for the first few months but once you have started something, once you have broken something, you have broken into the possibility and you cannot take too much of a chance.

THE CHAIRMAN: May I interrupt you for a moment? Do I understand here you produce 48 per cent of what you consume in Manitoba?

MR. MOFFAT: Yes. It is not the same oil that is involved but the amount we consume on balance, that is 100 per cent of our crude, we consume 48 per cent of that.

THE CHAIRMAN: Do you export?

MR. MOFFAT: A very large portion of the production is going out of the province.

THE CHAIRMAN: That is why I do not understand your page 78 on these quotas.

MR. MOFFAT: Well, we are shipping out our own oil and we are using Alberta oil and we are using very much more oil than we are producing.

THE CHAIRMAN: But if you have a quota or a tariff to help your oil to be sold outside the province - - -

MR. MOFFAT: We have had no problem in selling the oil outside the province.

MR. COMMISSIONER HOWLAND: Are you fairly well satisfied that the Sarnia price is in fact controlled in the price to Manitoba?

MR. KEYES: I was going to say to Mr. Patterson that if you went beyond the Illinois situation, please do not push us into an examination of world pricing because it is very complicated. Within those general remarks, if you will accept them, that is what my understanding of the pricing system is, that, in fact, the Sarnia price does govern the price at which crude is sold for the pipe line in Manitoba.

MR. COMMISSIONER HOWLAND: I just wanted to find out whether you are satisfied because there are some who are not and after all you people know more about it.

MR. KEYES: You are asking me to stand by the producers of Manitoba but I would suspect if they were here they might say they had sold everything they could produce. Therefore, presumably,

they are quite satisfied with the situation as it exists.

MR. COMMISSIONER HOWLAND: You also said it was a problem that was concerned with the consumers. Are you satisfied from the consumers' point of view that prices which obtain here are in fact set effectively by the Sarnia price back to transportation?

MR. KEYES: Are you trying to get to the point where if you get an extension of the pipeline beyond Sarnia with the system of transportation we could end up with a lower price?

MR. COMMISSIONER HOWLAND: I am not trying to get anywhere. I am sitting right here.

MR. PATTERSON: I was going to take you down that road in a moment.

MR. KEYES: Perhaps we can say this: from my general observations -- we have not specifically been asked to comment on this aspect of it but from my general observation as early as this morning I noticed that the station where I purchase my gasoline where I was paying 41 cents or 42 cents on Friday I got it for 38.9 cents this morning. Presumably a competitve factor is in the market within the province governing the market price.

MR. COMMISSIONER HOWLAND: You did not check on the price at Sarnia, though?

MR. KEYES: No, I did not.

MR. PATTERSON: On page 7 you mention that you are concerned about some of the inconsistencies in the matter of the export of energy generally which appear to require some analysis. What do you consider to be the inconsistencies?

MR. KEYES: If you turn to page 9 I think you will find one of the inconsistencies which we have noted.

MR. PATTERSON: I did have that one but I wondered if there were other matters that you were thinking of. That is, you were concerned about restrictions on electricity and the export of gas rather than its use in Canada.

MR.KEYES: I think that is the main one, that is the major one.

MR. PATTERSON: Have you anything further in regard to what you think of as other inconsistencies?

MR. KEYES: No, not at this point.

MR. PATTERSON: Is your thinking that it could be a better use for Canada to make particularly of natural gas by reason of its petrochemical possibilities, to use that here even to the extent of using it for thermo purposes and the export being something, such as electricity, which does not have the other side uses?

MR. KEYES: I do not think our thinking would lead us to the point where the end uses to

which the export of fuel is to be put would be a consideration. Does that answer your question?

MR. PATTERSON: I think it does, yes.

Since we have reached page 8, you say at the top of that page:

> "These studies show that a 75 per cent load would enable this northern power to compete with alternative sources".

The 75 per cent load I do not quite follow because I do not have the size of facilities. What is the nature of the 75 per cent load?

MR. KEYES: Seventy-five per cent of annual use is what we are speaking about. The facilities would be loaded to capacity for 75 per cent of the time during the year.

MR. PATTERSON: That is, no matter what size of facility you are using?

MR. KEYES: Well, the reference from which we drew this 75 per cent load was based on the magnitude of the development that might be considered on the Nelson River in the neighbourhood of 200 to 400 megowatt plants.

MR. PATTERSON: That is what I was concerned about. Your suggestion in regard to power and the idea of entering into that field of the Federal Government is due to what you say at page 9. You are interested in the expansion of the transmission network to available markets

because that is the most serious handicap to the development of northern Canadian water power. Now, do you think it is equally proper for one to read that sentence simply substituting for "development of Northern Canadian water power sites" the words "Western Canadian oil" or "Alberta gas"? Is your northern water power problem to be judged in isolation or are we to consider all these developments by extending Canadian export markets in one trough and try to remedy everything for everybody?

MR. KEYES: There are two or three different points in the question: dealing with the first one first not necessarily in terms of the question which you put, in our minds being the most important one, the essential elements do exist in terms of raw material, productive source of supply being available not remote from its possible markets, the handicap being the means of getting it to the market. In that sense they are similar. I must apologize. I have lost your second point.

MR. PATTERSON: Well, I asked, after agreeing with that do you feel that since the exporting of these resources suffer from the same handicap we should consider all of those together and try to work out some kind of balance?

MR. KEYES: Well, certainly the development of site in areas in Western Canada, hydro sites in Western Canada where there are relatively small

Canadian markets spreading eastward or westward, the export market would be an attraction. We have indicated in the brief that one should not consider natural gas exports without giving some consideration with respect to the export of electrical energy. On the other hand, I think also in the brief we would be at a loss to suggest to you how one might go about getting a degree of consistency across the various fuels. You have gas in one form and oil in another and water power in another. In other words, beyond the fact there is something inconsistent in saying that you may export natural gas but you cannot export electrical energy over the same term of years.

MR. PATTERSON: Well, then, would you not think that this National Energy Board which is one of the things we must talk about is perhaps the best way in which development and advice to government in regard to the inconsistencies you have mentioned could be worked out?

MR. KEYES: Mr. Moffat is our Energy Board man.

MR. MOFFAT: Before starting on the Energy Board I would like to go back to the other question and I would refer you to the bottom of page 84 and the top of page 85. This is another subject that comes up twice in the brief and we make a point there in connection with federal participation. In projects of this type we think

federal participation should come under two points. The last sentence of the paragraph -- (1) where it is of such magnitude that it is a national enterprise in its own right and (2) it is something that could be extended to residents in all parts of Canada. You will notice a careful choice of words, "equitably". We do not say the same type of project in every area but available to them if they wish to use the same thing equitably, so if one gets transmission another gets something else. The transmission line has the added feature that it is one that can apply in nearly all areas because nearly all the areas have long distance transmission lines so you have a special circumstance there. If one does not want to use it and is interested in something else the principle that we lay down is "available equitably to residents of all parts of Canada".

MR. COMMISSIONER HOWLAND: I take it that you are thinking now that the Federal Government should keep an eye on regional interest?

MR. MOFFAT: That is right.

MR. COMMISSIONER HOWLAND: You are not going to relate equity to per capita consumption?

MR. MOFFAT: No.

MR. COMMISSIONER HOWLAND: But reasonable regional - - -

MR. MOFFAT: Reasonable regional -- all

parts of the country get the same assistance.

MR. PATTERSON: So you are going back, because it is at page 85 that the thought I put to you a moment ago came to me.

MR. MOFFAT: Yes.

MR. PATTERSON: Perhaps in advising the Federal Government as to its participation in these projects some form of board would have a reasonable place?

MR. MOFFAT: Yes. Our thought on that is that some form of a national policy should be envisaged and those things should be developed within a general policy framework, but that does not necessarily mean there should be a specialized board for that purpose. We try to deal with that a little earlier, starting at page 82, near the bottom of the page, where there is a reference to the National Energy Board.

MR. PATTERSON: That is right.

MR. MOFFAT: And we have made the position that a good many of these problems, and particularly the problem we have just been talking about, are of such major issue of national policy that you cannot really effectively delegate them to anybody except an elected representative of the Parliament of Canada, and any national policy should be tied back to that, with possible daily administration and study made by someone else, but

the real responsibility should be tied back to the elected representatives.

We also make the point that a substantial part of the problem of energy has to be coordinated with other things. For instance, is the cost of transporting coal by rail an energy problem or a transportation problem? If you take it out of transportation and put it into energy you break down a coordination which is already there. You can find a good many examples of that where creating an energy board would make a good package on the one hand, and break it up on the other.

You have heard the arguments in favour of it, and I don't think we need repeat them.

MR. PATTERSON: The reason I am putting to you the arguments on the other side is to get you to amplify yours.

MR. MOFFAT: Yes, I realize that. The conclusion we came to as to the attitude to be taken by the Federal Government -- and these points have been cleared with the Government -- is that we should not express an opinion, but simply say that the Federal authorities should go about these things, and we are not presuming to advise them as to what should be done. However, if they are going to set up this kind of permanent board they should not overlook the fact that these kind of problems will arise with them, and then we

throw out the thought that maybe a good number of these problems would be dealt with better by a Royal Commission type of thing, which would do the study, make the recommendation to the Government, and then disappear, rather than become a long-term thing and that we should suffer from Parkinson's law (if I may use your Secretary's name). This was the conclusion we came to after a good deal of discussion on both sides, and you will find there is no firm policy.

MR. PATTERSON: No. That thinking -- does that apply to the question of rate supervision of pipelines with the same force?

MR. MOFFAT: No, not quite the same force. On the rate supervision, we reached a slightly different conclusion: on the rate supervision it seemed to us that the coordination with other types of industry, transportationwise, would be of greater importance, and also that there needed to be available the facilities of some people who are specialists in the field and who know a good deal about the background. The suggestion we are making here, a couple of pages earlier, is that such a type of organization should be in existence and more or less set up on the basis of somebody pulling the trigger and putting it into effect, but not that it should be injected in the sense, "You have to deal with all the details of this

thing permanently".

You will find we use the words "from time to time" and so on, with the idea that if the public and a substantial number of the people in the community become dissatisfied, then they have an appeal to somebody who can look at this thing. But, the machinery to do that should be created and held in abeyance and not put into effect unless a substantial number of complaints arises and there is any significant amount of dissatisfaction.

One point we made specifically was that there should be published tariffs so that there would be full information available. As we understand at the present time, on oil the tariffs are being published, but they are not approved; simply published.

In the case of gas pipelines, apparently, the only published source is the prospectus of the company. We think there should be provision that there must be public knowledge, and then, the machinery which should be invoked to look at that.

MR.PATTERSON: Would you envisage these people you mention, who would deal with that problem, were there public concern, would be sort of taking a dry run all the time and keeping an eye on these things and analysing them, and so on, and if they felt it was out of line they would

say nothing until the public squawked?

MR. MOFFAT: Well, this is one of those questions as to who pulls the trigger and when, and I don't think we have discussed it in such light. One member of your Commission knows we have been over this subject with respect to the Board of Transport Commissioners.

MR. PATTERSON: Yes.

MR. MOFFAT: The thing we fear -- and on which we have quite strong instructions from the government -- is putting in another regulatory body, but, on the other hand, work out something to be there if anything arises. If it turns out you are getting those kind of inquiries too often, then you may have to do something else.

MR. PATTERSON: Mr. Chairman, if we could have a few minutes' break I could consult my notes: I believe I have covered the ground.

---A short recess.

THE CHAIRMAN: We will now resume our hearings. Mr. Patterson?

MR. PATTERSON: Thank you, Mr. Chairman. I have reviewed my notes, and that concludes the questioning that I have. Thank you.

MR. COMMISSIONER BRITNELL: Just one or two points ofdetail that I would like to get sorted out: first, on page 45, the table at the

top of the page and the explanation below; how the sulphur content of Manitoba crude produced a penalty in the form of a price reduction between January 7, 1955 and February 16, 1955. I notice, though, that before that there had been a considerable price reduction from January, 1954 to January, 1955 and I wondered what might have caused that; or is it part of the same thing?

MR. KEYES: No, sir. I don't think we can give you a specific answer to it. It could have been adjustments from the exchange value of the American dollar, and that sort of thing. I don't think we can be specific. It certainly is not the sulphur content. Mr. Moffat indicates in the third and fourth lines the adjustment as between July 21, 1953 and January 14, 1954; that adjustment was an adjustment because of the introduction of the Trans-Prairie pipeline and the establishment of field service.

MR. MOFFAT: The one price of 2.835 is delivered to Cromer, and the other is delivered to the receiving end of the line.

MR. COMMISSIONER BRITNELL: Yes, I noticed that. It was the one beginning January 16th -- the next 16 cents -- that I was puzzled about. I would assume from what you have said, and from certain material presented in the brief, that geographical location gives Manitoba crude a price

advantage of approximately 18 cents over Redwater crude. I am not sure where I picked that up.

MR. MOFFAT: Page 49.

MR. COMMISSIONER BRITNELL: Yes, there is a table there.

MR. MOFFAT: Cromer to Sarnia 48 cents; Redwater to Sarnia 66 cents.

MR. COMMISSIONER BRITNELL: And that would hold for both the American and Ontario markets -- that price differential or price advantage of about 18 cents?

MR. KEYES: Not exactly. It would be, approximately, but you are taking a basic point at Sarnia and deducting the Cromer price, where you have got an 18-cent differential there, and it would be smaller at intermediate points.

MR. COMMISSIONER BRITNELL: I wondered about that. Your advantage in the American markets in the mid-western States would not be as great as that.

MR. KEYES: It would be the transportation haul from whatever point you wish to take.

MR. MOFFAT: At page 49 you have Redwater to Gretna, 38 cents, and Cromer to Gretna, 12 cents, which leaves a difference of 26 cents.

MR. COMMISSIONER BRITNELL: Quite. It is in general, though, this geographical advantage reflected in the wellhead price which would enable you to sell your total production even if Manitoba

should become on balance, like Saskatchewan, a surplus producer of crude oil.

MR. KEYES: Yes; basically, it would be an attraction.

MR. COMMISSIONER BRITNELL: There is one more point on page 82: I wondered whether you would mind clarifying the first full sentence at the top of the page:

> "If it should become necessary for the public authority to intervene, the first action might be in regard to the overall level of earnings and only at a later stage might attention be directed to rates and charges".

MR. MOFFAT: Dr. Britnell, this is part of the general approach we have been trying to visualize here, that this process of relating prices and charges would be a step-by-step thing, going the least distance possible, and we are suggesting that at the start it should be simply a requirement of keeping in touch with the situation, knowing the information and having the rates published. Then, in this sentence we are suggesting if that is not satisfactory and there has to be some further investigation, maybe the first investigation might limit itself to a look at the overall level of earnings, and if something needs to be done and it is found the earnings of one of the pipelines is too high, something may be able

to be worked out to take care of it at that point without having to go into a detailed investigation and fixing the charges along the line. If that should prove unsatisfactory, then only at a later stage do you have to go into full detail.

MR. COMMISSIONER BRITNELL: One more point on which I would like to know whether I am right in the assumption I am making: Am I right in assuming -- and this arises, I think, out of one of your last answers -- that given proper safeguards you would prefer a separate regulatory body to some sort of expansion or extension of the existing powers and responsibilities of the Board of Transport Commissioners?

MR. MOFFAT: No, I don't think you can read that into what I said.

MR. COMMISSIONER BRITNELL: I wasn't trying to.

MR. MOFFAT: I didn't intend that.

MR. COMMISSIONER BRITNELL: No.

MR. MOFFAT: I think the point we want to make, fundamentally, is that the Federal officials are in a better position to judge it than we are, and it should be left over for them to decide whether it would be a job added on to the Board of Transport Commissioners, or whether it would be a separate body.

There is this about it, however: it has

to be done by somebody who is familiar and up to date with rate regulation techniques, and if this is primarily a transportation problem itmay be more important to coordinate with other aspects of transportation than with other aspects of energy, and that leads to the argument that it could be well done by the Board of Transport Commissioners. But, we wanted to leave it open. As a matter of fact, one draft of the brief had the Board of Transport Commissioners named as a suggestion, and then we took it out so as to leave it open.

MR. COMMISSIONER BRITNELL: You have a completely open mind?

MR. MOFFAT: Yes.

MR. COMMISSIONER HOWLAND: I would like to refer back to our conversation about pricing in Manitoba for crude oil. I notice at page 78 when you are commenting on the import of petroleum and its products that you are opposed to quotas on the ground that apparently these imports affect the pricing structure here as well as the price of crude oil in Sarnia; is this correct?

MR. MOFFAT: Yes, a fairly important amount of imported products coming into this province from the States and Eastern Canada.

MR. COMMISSIONER HOWLAND: So you have two things bearing on the price structure: the Sarnia price of crude and also the competitive

price of imported products?

MR. MOFFAT: Yes, and in addition to that, and probably more important in the short run than that one, you have the fairly strong position of a refinery which is carrying itself through into the retail price, and we also have the fairly substantial reduction in the last few days. We have had a series of those, and that is aside from and over and above what you might call the wholesale.

MR. KEYES: Mr. Howland, there is a very small proportion of Manitoba's product requirement imported at the present time. It is on the petroleum gas and that sort of thing; so, I think you can say essentially it is the crude. There is not too much product imported into the province that we cannot refine here. So, I think you might say it is the crude prices in the province -- basically, the price of petroleum.

MR. COMMISSIONER HOWLAND: Yes, but do I take it correctly that because you feel so strongly about the question of quota being applied to imports, on page 78, because even if the movement is only small, the freedom of that movement ---

MR. KEYES: Yes, that is it.

MR. COMMISSIONER HARDY: I might comment, Mr. Chairman, that the oil companies led us to believe in Calgary that in the Ontario area

the retail price was governed by the imported products rather than the crude price plus transportation.

MR. KEYES: I am sorry, I was speaking of a situation on which I do not have particular knowledge.

MR. COMMISSIONER HARDY: There is greater movement into Ontario price-wise than there is here, but it still does govern the price, according to the large oil companies.

MR. KEYES: Far be it from me to attempt to enlarge on that.

MR. COMMISSIONER HARDY: It is an important point in deciding as to what the implication of quotas might be, and the best evidence, as I read our transcripts, you have got the retail price that is governed by different factors entirely than the price that is paid.

MR. KEYES: I think you cannot get away from the fact that imported product is affecting the price structure in this country. You might develop my argument to the point, though, that if an Ontario refiner is going to manufacture his products, he has to set his price based on imported products, and therefore that is reflected back in the price of crude which, in turn, moves back into Manitoba. So that you do have your imported product price structure governing your refining return.

MR. COMMISSIONER HARDY: My only answer to that, as an amateur economist, is that I agree that is what should happen, but it doesn't seem to be happening; it does not fit the picture presented to us.

MR. KEYES: Well, I would not argue with what transcript you do have.

MR. PATTERSON: Mr. Chairman, if I might just for a moment make one matter clear: I overlooked this morning making it clear on the record that in marking the brief as W-21-1, the appendices which are contained in a large red folder are not being separately marked, since they are listed as appendices to the brief itself and become part of that submission number.

THE CHAIRMAN: Mr. Moffat, Mr. Keyes and Mr. Cowan, we thank you very much for submitting this brief on the part of your Government. I notice in your brief you state that later you you will submit another one, which I assure you will be quite welcome and a great asset to the Commissioners towards the solution of this problem.

MR. MOFFAT: Mr. Chairman, for the sake of the record we should be clear that we asked for the right to submit another one. We do not want to be committed that we necessarily will.

THE CHAIRMAN: It will be welcome, anyway. Thank you very much.

Submission of

TRANS-PRAIRIE PIPELINES LTD

APPEARANCES:

Mr. Don. R. Brandt	- President
Mr. D. J. McDonald	- Director
Mr. R. G. B. Dickson, Q.C.	- Director, and Vice-President
Mr. J. Blair	- Counsel

THE CHAIRMAN: We will now proceed with the submission of Trans-Prairie Pipelines Limited.

MR. PATTERSON: Mr. Chairman, I would ask that the submission of Trans-Prairie Pipelines Limited be marked as Exhibit W-21-2.

---EXHIBIT NO. W-21-2: Submission of Trans-Prairie Pipelines Limited.

MR. PATTERSON: Mr. Blair, counsel for Trans-Prairie Pipelines Limited, is here and I would ask him to introduce the gentlemen who will be making the submission.

MR. BLAIR: Mr. Chairman, members of the Commission, the submission will be read by Mr. D.R. Brandt of Edmonton, President of the Company. We also have Mr. D.J. McDonald of Winnipeg, a director of the company, and we hope to be joined in a few moments by Mr. R.G.B. Dickson, Q.C., of Winnipeg, a director and vice-president, and we put ourselves entirely in the

hands of the Commission as to how the submission should be presented. If it meets with your approval, Mr. Brandt will commence reading it.

THE CHAIRMAN: Yes, Mr. Brandt, you may proceed.

MR. BRANDT: Thank you, Mr. Chairman and Commissioners.

The purpose of this submission is to assist the Commission by acquainting it with the operations and viewpoint of an independent operator of oil pipelines. Trans-Prairie Pipelines Ltd. is an independent pipeline company in the sense that it is not directly or indirectly connected with any producing or refining company and is engaged solely in the business of pipeline transportation.

PART II. Description of Trans-Prairie Pipelines Ltd.

1. History: The company was incorporated in the Province of Manitoba in August 5, 1954. It acquired a pipeline system, which had commenced operations in January 1954, gathering oil from the Daly field in southwestern Manitoba for delivery to Interprovincial Pipe Line's pumping station at Cromer, Manitoba.

The construction of this pipeline was undertaken originally by an independent group when the large producing companies interested in the field

showed no interest in the early development of a pipeline system. The operation of the pipeline in the Daly field and its extension to the Virden-Roselea fields were key factors in the spectacular growth of these fields in the years 1954 to 1956.

I would like to read an insert at this time, with your permission. In May of 1955 Trans-Prairie Pipelines Limited applied to the Saskatchewan Conservation Board for a construction permit to build gathering systems in the Midale, Alida and Frobisher fields to railroad loading racks in south-eastern Saskatchewan. This was stage 1 of a two-stage plan to get this crude to an all-year market. Some of the major producers in these fields asked to have the hearings postponed, and it is felt that Trans-Prairie's action stimulated the application by Westspur to the Board of Transport Commissioners to construct the system to serve the same general area.

In 1955 Trans-Prairie incorporated a pipeline company by special act of the Parliament of Canada for the purpose of extending its pipe line system into the adjacent developing oil fields of southeastern Saskatchewan. This company, however, was unsuccessful in its application to the Board of Transport Commissioners for Canada and the Board granted the permit to construct in the new Saskatchewan fields to Westspur Pipe Line Company

which had been organized by Imperial Oil with other producers later becoming shareholders.

In 1956, important new oil discoveries occurred in Saskatchewan in the vicinity of Weyburn, west of Midale, the terminus of the Westspur Pipe Line Company system. Westspur refused to consider an immediate extension of its pipeline into the new fields. Trans-Prairie then applied for and, after a hearing before the Saskatchewan Oil and Gas Conservation Board, obtained from the Saskatchewan Minister of Mineral Resources, a permit dated October 1, 1956, to construct a pipe line system in the Weyburn-Halbrite fields for the purpose of delivering oil to the Westspur system at Midale. Westspur was stirred to action by the application of Trans-Prairie in Saskatchewan and applied shortly afterwards to the Board of Transport Commissioners for permission to construct a similar pipeline to the Weyburn-Halbrite fields. Its application was dismissed after a hearing on October 15, 1956, on the ground that duplication of pipeline facilities in the field was not in the public interest.

Subsequently, on November 5, 1956, Westspur applied to the Board of Transport Commissioners for a permit to build a pipeline to the Florence area. This application was opposed at hearings on November 22 and 23, 1956, by the

Saskatchewan Department of Mineral Resources on the ground that it was premature and that it interfered with proper management of the newly discovered oil field by the Province. It was considered that this premature application might have been made to tie up the newly discovered Florence field and prevent it from falling to Trans-Prairie or some other provincially incorporated company. The Board of Transport Commissioners reserved its decision and later Westspur withdrew its application as part of a general settlement in which it conceded jurisdiction over gathering lines to the Province of Saskatchewan.

The Trans-Prairie pipeline system is one of the very few in Canada, apart from the lines wholly owned by major companies, built without the benefit of any throughput agreements.

This brief history will indicate that Trans-Prairie, as an independent company, has been able to provide pipeline service to two new oil fields much more quickly than large oil companies or pipe lines controlled by them were prepared to do. It may also indicate that, spurred by the competition of Trans-Prairie, pipelines owned or controlled by large oil companies have endeavoured to extend their systems more speedily and even prematurely into new fields. It also demonstrates that Trans-Prairie has been and is affected by the confusion about jurisdiction

over pipelines. (Trans-Prairie participated in the hearing by the Board of Transport Commissioners on November 5, 1957, of the application by Westspur for permission to transfer its gathering lines to Producers Pipelines Ltd. and supported the application.)

2. Operations and Financial Structure: At present the company operates 105 miles of 3", 4" and 6" pipe in the Virden-Daly fields in Manitoba with a capacity of 23,000 B.D. Throughput in 1957 totalled 6,010,946 barrels.

The Weyburn system consists of 50 1/2 miles of 4", 6", 8" and 10" pipe with a capacity of 40,000 B.D. Throughput in 1957 amounted to 2,729,325 barrels.

An orientation map of the company's present and projected pipeline system is included on pages 10 and 11 of the 1957 Annual Report filed herewith.

MR. PATTERSON: Mr. Chairman, if I may just interrupt for a moment, perhaps we should take this opportunity to file that Annual Report as W-21-2-A.

---EXHIBIT NO. W-21-2-A: Annual Report.

MR. BRANDT: Total investment in Plant, Property and Equipment at cost on December 31, 1957, exceeded $3,300,000 of which $1,800,000 was in the Virden-Daly field and $1,500,000 in the

Weyburn field.

The following table may assist in assessing the company's growth and the growing importance of its service to the oil industries.

Year	Total Investment at Cost	Throughput (bbls)
1954	$ 790,184.35	923,897
1955	1,297,128.22	4,060,607
1956	2,235,888.39	5,750,515
1957	3,355,197.20	8,740,271

It is expected that the cost of additions to the system in 1958 will exceed $150,000 for the Manitoba fields and $650,000 for the Saskatchewan fields and that yearly throughput will rise to between 11,000,000 and 12,000,000 barrels.

A copy of the last balance sheet of the company is attached as Appendix 1. Of the common shares, 96.7% are owned by Canadians and 64% are held in Western Canada.

Here I would like to read to you the Board of Directors.

Mr. Don R. Brandt	- Edmonton
Mr. R.G.B. Dickson,Q.C.	- Winnipeg
Mr. D.J. McDonald	- Winnipeg
Mr. F.L. Croteau	- Calgary
Mr. W.R. Wiebe	- Edmonton
Mr. W.S. McGregor	- Edmonton
Mr. R.N. Knapp-Fisher	- Weyburn
Mr. P.M. Mackenzie	- Montreal

Historical summaries of the published tariffs of the company are attached as Appendix II. The tariffs have been reduced several times as throughput has increased and the benefits of economies achieved by the company have been passed

on to shippers of crude.

In the following sections of this submission the company wishes to offer comments on pipeline policy and jurisdiction and to make recommendations for the consideration of the Commission.

PART III. PIPELINE POLICY.

1. Present position of Canadian Pipelines: The present position of Canadian oil pipelines is summarized in the two following extracts taken from the study on Canadian Energy Prospects prepared for the Royal Commission on Canada's Economic Prospects:

"Oil pipelining in Canada has also become a major industry. Beginning with the construction of the Portland-Montreal pipeline in 1941 and given considerable impetus by the discoveries in Western Canada after 1947, it has now grown to the point where main transmission lines with a combined length of 6,000 miles are in operation across the country. As a rule these facilities are operated by the large internationally connected oil companies. Ownership and control is overwhelmingly in non-resident hand". (p. 145)

"Few small or independent concerns have managed to retain their identity in the pipeline business." (p. 147)

While the corporate structure of Canadian

pipelines varies, the reality of control by large international oil company does not. (The degree of control exercised by international oil companies is indicated by the following extract from the Report of the Royal Commission on Canada's Economic Prospects at p. 130

> "At the end of 1956 approximately 75 per cent of the proven oil reserves in Western Canada were controlled by six of the largest international companies; and the same six companies held between them about 40 per cent of the gross acreage under reservation or lease in Western Canada. At the same time over 85 per cent of the total refinery capacity in Canada was also subject to foreign ownership and control".)

In some instances the public or other producers are admitted to participation as shareholders but there is no evidence to show that, in these cases, the control exercised by major international companies over Canada's principal oil pipe lines is in any way diluted. Only rarely is company control both actually in Canadian hands and independent of any production or refining interests.

Control of transportation facilities historically has been regarded as a key weapon of major oil companies in retaining control of the market. (Rostow - A National Policy for the Oil Industry (1948) p. 57-58.

"The chief weapon of the major companies for protecting their position in the market for crude oil is their ownership of pipelines, the indispensable link (except for shore and off-shore wells) between the oil well and the refinery. To a lesser but still vital extent, ownership of tankers serves the same purpose of forcing the independent to sell his crude in the field, or to be dependent on independent refiners, weaker and far less effective purchasers of his product. Control of transportation facilities enable the majors to locate their refineries in the market areas, and has remitted non-integrated refineries largely to shifting and unsatisfactory locations in the field. In the late thirties, the major companies owned between 85 and 89 per cent of the important crude oil trunk pipelines.")

In 1914, Mr. Justice Holmes in the Standard Oil case stated that the company through its control of pipelines......

"made itself master of the fields without the necessity of owning them and carried across half the continent a great subject of international commerce coming from many owners but, by the duress of which the Standard Oil Company was master, carrying it all as its own."

(234 U.S. at 559.)

While it may be objected that conditions have changed since the day of John D. Rockefeller, it must be conceded that control of pipelines is still eagerly sought by major oil companies and that the controversy over control of pipelines by major oil companies has not abated in the United States. (A current example is the protracted hearing by The Texas Railway Commission of an application by Texas independent producers requesting connection with established pipeline systems.)

2. Public Interest served by existence of Independent Pipelines: The maintenance of independent transportation facilities serves the welfare of Canada as a whole as well as that of the oil industry. It has long been a cardinal principle of transportation policy that public carriers should be free of the control, whether direct or indirect of powerful individual shippers or users of their services. The principle is as valid in its application to oil pipelines as it is to other forms of transportation. The reasons for asserting this basic principle of public policy may be briefly summarized.

a. No discrimination: An independent pipeline is free from any compulsion to discriminate between particular shippers or producers. The forms of discrimination are infinite and include denial of access, erection of unreasonable conditions as

to minimum tender, quality and other matters and unreasonable restraint and delay in expanding pipelines into new fields. Although independent producers may be protected by conservation laws and other measures from the crudest type of discrimination, it would be unrealistic to ignore the obvious truth that the policies of substantially all Canadian oil pipelines are dominated by the major international oil companies participating in them.

It should be noted that Trans-Prairie has always operated as a common carrier and will continue to do so. In the United States pipelines purchase crude to avoid being declared common carriers thereby being subject to tariff regulation. I believe it is regulated by the ICC.

b. Fair and Economic Tariffs: The tariffs of independent pipelines must of necessity reflect actual costs of carriage plus a fair return on investment capital commensurate with the risks involved and introduce a salutary factor in an industry controlled by large integrated companies. An independent line, subject to regulation by public authority, is under constant and healthy pressure from its users to reduce charges to the lowest level consistent with economic and efficient operation of the line. Such tariffs are a realistic charge and represent neither a burden upon nor a subsidy to particular sections of the industry.

While the tariffs of an independent company like Trans-Prairie must of necessity be closely related to costs with profit calculated on a reasonable rate base formula, some lines operated by producing interests have not established their tariffs on the same principle. In 1955 for example, representatives of Westspur Pipe Lines admitted to the Board of Transport Commissioners that their proposed tariffs would be lower than fully economic tariffs. It was stated that the purpose of depreciating rates was to maximize the production income of the company's producer shareholders, against which depletion allowance might be credited as provided by the Income Tax Act. (Transcript of evidence, Board of Transport Commissions for Canada, September 21, 1955, at p. 3663:

> "On the contrary, their interest as producers is best served by earning a lower rate of return on the pipeline operation and increasing the earnings in the producing end. This is due to the effect of the allowance for depletion in calculating income tax, which has the effect of reducing the effective income tax compared with 47 per cent on pipeline earnings."

Two undesirable consequences follow from this calculated departure from the standard principles of rate making. First, the benefits which public policy intended to confer on the oil industry as a

whole in the interest of national development are distorted to become weapons of unfair competition within the industry at the expense of the general taxpayer. Secondly, inequities result as between shareholders in such companies which tend to bear hardest on the smaller producers. Unless each producer should happen to own shares in such a pipeline company in exact proportion to his yearly throughput, it follows that a benefit is conferred on some producers at the expense of others. If the proportion of capital owned by a producer is greater than his proportion of throughput, he will involuntarily confer a benefit on other producer shareholders. Conversley, if his shareholdings are proportionately less than his throughput he will have received a benefit from other producers.

c. Initiative in developing new fields and markets: The brief history of Trans-Prairie already given indicates that an independent pipeline is more aggressive anddetermined in opening up new fields than lines dominated by large international oil companies or affiliates. The report of the Royal Commission on Canada's Economic Prospects in several places comments on the divergence between the national interest and the particular interest pursued by international oil companies. e.g. p. 130.

"To the international oil companies with

operations in many parts of the world, it may not seem a matter of great urgency or concern whether large new markets are found for Canadian oil. They can supply all these markets from other sources and through other companies with which they are associated. They might even prefer to increase almost indefinitely their reserves of oil in Canada and draw down their reserves elsewhere. Also, as we have suggested, they are under pressure within the United States to do nothing that might disturb domestic prices there. In our opinion, however, it is clearly in the Canadian national interest that new markets be found. Only in this way can there be assurance that a steady and rapid pace of exploration and development in Canada will be maintained. Only in this way can early advantage be taken of this great natural resource and its exploitation not left to the hazards of an uncertain technological future. Above all, it is only in this way that a place can be left within the Canadian oil industry for the independent Canadian producers, who, unlike the large international companies, must receive some return on their investment in Canada if they are to stay in business and not be forced to sell out to the foreign-owned companies, which already hold such a high proportion of all the acreage now under

reservation or lease in Western Canada. It would seem that here is one instance, as is suggested in the discussion of foreign investment in a later chapter, where there might easily be some divergence between the Canadian national interest and the interest of foreign companies operating in Canada.")

An independent pipeline is not inhibited by ties with existing domestic fields or considerations of foreign oil operations and is prepared to offer service to new fields much more quickly than pipelines controlled by international oil companies. An independent company is able to assess each new field on its economic merits and is not distracted by conflicting considerations which affect the policy of international companies.

Experience does not in any way support the contention of other pipeline companies that the development of a Canadian oil industry will be hampered if control of pipelines is given to independent companies. Rather the opposite result may well follow because of the greater initiative which these companies can be expected to show in the developing of their enterprises.

d. An answer to Monopolistic practices: Independent pipelines are the natural allies of independent producers in their constant striving to expand and develop Canadian oil production.

Independent pipelines serve the interests of independent domestic producers and, equally, the strength of independent pipelines is enhanced by development of independent producing and refining interests. The interposition of some independent pipelines in the nation-wide network of producing, transportation, refining and marketing interests could disrupt and, to a degree, control the otherwise virtually complete monopoly over the oil business exercised by large international companies.

The growth of competitive influences in the oil industry would ultimately benefit the consumer as well as the independent producer. (Rostow--A National Policy for the Oil Industry, p. 57.

> "The major companies have two chief interests in the price of crude. They are generally in favor of production controls, and an adequately high market price, which are the necessary conditions of high retail prices. Under conditions of high production and intense competition in the crude market, it is more difficult for the majors to buy up independently produced crude, which might otherwise be sold to independent refiners and reach the retail market through independent distributors. The major companies know that in the past a relatively small flow of cheap crude through independent refiners to the retail markets has been able to exert a

disproportionate influence in the fragile and monopolistic "led" market for gasoline. They realize also that even though they now control a larger share of known reserves than ever before, new fields outside their own areas of control may be discovered, to impose new strains on the price system unless the policy of overall limitation of production is firmly enforced. In this way they can be reasonably sure that their investments will be protected against great changes in values which might otherwise follow new discoveries of oil, or improvements in extraction technique. On the other hand, the major companies are the purchasers of crude oil, and as such are interested, within the framework of control, in buying as cheaply as they can.")

e. An opportunity for Canadian investment: The history of Canadian pipelines has been excellent and they provide a most attractive vehicle for Canadian investment in the oil industry. Independent pipeline companies, whose shareholders are widely diffused, offer an excellent opportunity for Canadian investors to participate in and contribute to the development of the Canadian oil industry. This opportunity is substantially denied to Canadians to the extent that pipelines are owned or controlled by international companies.

3. Principles of pipeline policy: Canadian and United States oil pipeline experience has indicated that certain basic principles must be observed in the development of sound pipeline policy. In essence Trans-Prairie adopts "the three general requisites of any public policy toward crude oil pipelines" stated by an authority in the field, as follows:

"(1) Acknowledging the existence of long, intermediate and short-run decreasing costs in the operation of pipelines, any acceptable public policy toward pipelines must include provisions designed to achieve the social optimum of lowest cost per unit by encouraging the construction of the largest possible lines in any particular area. Because of the uneconomic higher costs (and therefore wasted resources) which arise from carrying oil in small quantities, any policy must be rejected if it encourages the construction of several small lines where one large line could be used.

"(2) All companies desiring access to the lines should have the right thereto both initially and permanently guaranteed, in order that there can be no valid grounds for charges that the owners of the lines use them to control the producing and/or refining stages of the

industry. Not only should there be guaranteed access, there should also be equalized costs for all companies using the lines.

"(3) These two goals of any pipeline public policy should be achieved with the least possible amount of regulatory effort."

(Cookenboo, "Crude Oil Pipe Lines and Competition in the Oil Industry" (1955) p. 128.)

The implementation of a sound pipeline policy requires protective legislation to prevent it from being undermined by major oil companies. The economies possible from the construction of large diameter lines can only be realized if such lines, whether they be classified as gathering or trunk lines, are guaranteed the right of carriage from particular fields to particular markets. The policy represents a complete reversal of traditional United States oil pipeline policy which was based on the assumed right of each producer to bring his own produce to market. The proliferation of a considerable number of smaller size lines, usually owned by large integrated oil companies, was not only uneconomic but enabled the owners of pipelines to dictate effectively the conditions under which independent producers could operate.

It would serve little purpose to review in detail the tangled history of oil pipelines in the United States. The comment of Rostow,

applies with particular force to United States pipelines:

> "Our laws controlling the petroleum industry are a fantastic and inordinately complicated patchwork of State and federal regulation, and of industrial self-regulation..... Our system of oil law is wasteful and expensive; its consequences have no connection with its avowed purposes. It permits and strengthens monopolistic patterns of policy for an industry, which, in an appropriate legal environment, might serve the community as a model of the social and economic benefits of competition."

(Rostow, A National Policy for the Oil Industry.p.XV)

The dominant position of large integrated oil companies owning pipelines in all major producing areas has never been effectively challenged in United States Pipeline history. Successive attempts, dating from 1906, to make such pipelines common carriers, to limit their charges to other users and to limit their rates of return to their owners have all fallen short of their main purpose of breaking the monopoly power of the large integrated companies. Independent pipeline companies have had little success because of the failure of the law to protect their supply and market from the competition of parallel lines constructed by the large integrated companies. So much has this pattern of operation

impressed itself on the United States industry that one authority argues the case for independent pipelines is hopeless because they can, at any time, be denied their supplies or their markets if a major producing company in the field served by the line should build its own line.
(Wolbert. "American Pipe Lines, Their Industrial Structure, Economic Status, & Legal Implications" (1952) p. 102.) The inability or unwillingness of public authority to regulate the construction and operation of oil pipelines should never become in Canada a reason for the development of conditions which, over the years, have placed independent United States producers at a perpetual disadvantage.

On the basis of the United States experience it is obvious that enforcement of sound pipeline policy requires clear regulatory legislation and the determination to resist attempts to undermine it.

4. Disadvantages suffered by Canadian independent pipeline companies: The basic disadvantages that independent pipeline companies suffer under is the same as that affecting all independent producers. At every stage, be it production, purchasing, transportation or refining, the Canadian oil industry is dominated by the international oil companies. Independents, wherever they operate,

are "boxed in" and limited in their power of expansion because of this inability to compete on equal terms with the huge international companies.

While Trans-Prairie has operated an efficient and economic pipeline service and has acquired valuable skill and experience in so doing, it has been frustrated in attempts to expand. For this company to survive, it is imperative that it should have an opportunity to offer its services in new fields as they develop. In the face of present trends it appears that the prospects of such expansion are not overly bright.

The concern of Trans-Prairie about its future and the future of other independents arises first, from present policies of regulatory authorities in relation to oil pipe lines and secondly, new policies which appear to be evolving.

(a) Present policies: At present, most permits to construct oil pipelines are granted only after a hearing by some competent authority such as the Board of Transport Commissioners for Canada or a Provincial Conservation Board. Such hearings follow a standard pattern. Applicants must present evidence of reserves and markets sufficient to justify the proposed line, engineering and cost evidence, evidence of financibility and tariffs. These proceedings should produce an environment equally fair to all applicants but in

fact they produce one entirely favourable to large companies.

It is now not unusual for the larger companies to organize what are sometimes called "joint ventures" in which all or most producers in the field are allowed some participation as shareholders. Though ownership is diffused, it is not seriously contended that major companies do not control companies operated on this basis. However, the ability of a large company to line up a syndicate of producers in the field has a significant influence on the attitude of regulatory boards.

Not infrequently, some, if not all producers, underwrite the projected pipeline by entering into various types of throughput agreements or deficiency guarantees by which they undertake to maintain the income of the pipeline at an economic level, whether or not full use is made of it. Such guarantees have a marked influence on costs of financing the enterprise and are invariably refused in their original or modified form to any competing pipeline. Bond purchasers under present day circumstances can be confronted with two identical projects except for throughput agreements. Decision as to preference in this event leaves little doubt. Financing without throughput agreements could be impossible.

Alternatively, the financing of the line

may be underwritten by a large oil company so that the financing cost is lowered because of the support of a large company which will be the principal beneficiary of its construction.

The tariff structure presented by such a joint venture may frequently be unrealistically depressed. An independent pipeline company must carefully relate its estimates of cost and through-put to arrive at a tariff which will convince under-writers and regulatory authorities that the project is economically sound. On the other hand there has been a tendency on the part of pipelines organized by producers to propose tariffs depressed below ordinarily remunerative levels. Such depreciated tariff structures are important factors in regulatory board decisions and not unnaturally place an inde-pendent company at a considerable disadvantage. There may be some doubt whether producers do obtain in all cases full advantage of low rates promised after the line is put into operation.

The justification advanced for the creation of a low tariff structure is that producers using the line obtain a real advantage in the greater net price received for their product. The evidence given at the 1955 Board of Transport Commissioners hearing in this matter has been reviewed in section 2(b) of this part. It is clear that attempts to maximize production income are based on the

expectation of greater benefit from depletion allowance. Since shareholdings in these companies are not and cannot be of the same proportions as the throughput of the various shareholders, benefits, of necessity, are involuntarily extracted from some shareholders and conferred upon others. The important tax advantage, designed to encourage development of the extractive industries, is thus distorted and becomes an instrument of perpetuating the control of major oil companies over pipe lines.

(b) Projected policies: The present procedures of Canadian regulatory authorities are, nevertheless, founded on a sound principle. It is assumed that once a permit is granted to service a particular field, no parallel pipeline will be permitted to operate. Thus are the worst excesses of the United States experience guarded against.

The possibility has been expressed that under the 1958 Alberta Pipe Lines Act the Government of Alberta may no longer attempt to prevent the building of producer owned pipelines. This policy, if adopted, would preclude the entry of any new independent pipelines in Alberta. Once it is known that more than one pipeline permit may be granted for the same area of service, financing of independent pipelines will become impossible. A parallel pipeline controlled by a major company and serving a field dominated by that company would

drain off most of the oil and render the operation of the independent company uneconomic.

Such a policy, if further developed as advocated by some major oil companies would bring with it all the evils attendant upon United States oil pipeline operation. The transportation monopoly of major companies would be confirmed and independent producers in any field would be subjected to the dictates of major companies.

5. Taxation: This company supports and adopts the comments made by Interprovincial Pipeline Company, Producers Pipelines Ltd. and Westspur Pipe Line Company with respect to capital cost allowances under The Income Tax Act.

At present no capital cost allowance is permitted for easements acquired for rights-of-way. The company's investment in rights-of-way now exceeds $28,900. Such rights-of-way have not the enduring value of a fee simple interest in land but will have value only as long as the pipeline is operated. From the standpoint of investment, they are in no different position than the pipeline itself and it is considered proper that they should be subject to the same capital cost allowance as the parts of the pipeline which they serve.

It is also submitted that capital cost allowance in respect of individual gathering systems should be related to the anticipated life of the

fields and not be standardized at the rate applicable to the whole system. It seems reasonable that the life of the pipeline should be related for tax purposes to the life of the field it serves.

With your permission I would like to add another point here. Another point on tax policy is respectfully submitted here for your consideration. Legal and engineering expenses incurred as a result of permit applications are an ordinary and continuing expense of building a pipeline. Such expenses should be allowed as a taxable deduction.

6. Recommendations: Apart from the specific recommendations made in the preceding section regarding taxation, the company respectfully submits the following recommendations for the development of oil pipeline policy in Canada.

1. It should be the primary and positive aim of public policy to encourage the development of independent pipeline companies to operate both gathering lines and main transmission lines.

2. As a corollary, it should be an equally important aim of public policy to prevent the further extension of control of major international oil companies over oil pipelines, whether direct or indirect through companies in which other producers and even the public are allowed some minority participation.

3. The developing trend of permitting oil

pipelines to be built without protection from parallel pipelines should be stopped before it introduces the same elements of confusion and friction into Canadian pipeline operations as now exist in the United States.

4. Where regulatory authorities are called upon to adjudicate upon the applications of independent and non-independent pipeline companies for permission to build specific pipelines, every effort should be made to consider the applications on the basis of equalized figures and specifically:

(a) All parties should be required to propose a realistic economic tariff structure based on assessment of costs and throughput made in accordance with accepted regulatory practice.

(b) Producers in a given field should be required to offer the same throughput guarantees to the company to whom the permit is granted as to any competitor company sponsored by them. In this way, an independent pipeline proposal can compete realistically with proposals of producer sponsored lines by reducing financing charges and tariffs to a common basis.

5. It should be recognized that strengthening the position of independent pipeline companies is but part of a larger policy of promoting the interests of independent producers in the Canadian

oil industry and preventing further encroachments by international oil companies.

PART IV. JURISDICTION. It is essential to the sound development of Canadian pipelines that the respective areas of federal and provincial jurisdiction be clearly delineated. At present, confusion exists as to the limits of federal and provincial jurisdiction.

The submissions of the Province of Saskatchewan, Producers Pipelines Ltd. and Westspur Pipe Line Company and others have referred in some detail to the jurisdiction difficulties which have become apparent in relation to Canadian oil pipelines. The questions have arisen principally from the various decisions of the Board of Transport Commissioners and the Saskatchewan Government referred to in the historical section contained in Part II of this submission. Trans-Prairie has been vitally interested in all three decisions and is concerned by the problems which have emerged from them.

The main decisions and applications can be briefly summarized. The Westspur system, consisting of an interprovincial trunk line and numerous gathering lines, was constructed as an integral system by approval of the Board of Transport Commissioners granted in the autumn of 1955. The construction of such a unified system appeared then to provide the only practical method

of providing for the marketing of southeast Saskatchewan's growing oil production. After the construction of the Westspur system, Trans-Prairie in October, 1956 obtained from the Saskatchewan government a permit to build a gathering system connecting the newly discovered Weyburn-Halbrite fields with Westspur's Midale terminus. Shortly after, Westspur's application to the Board of Transport Commissioners to extend its line to the same area was rejected on grounds of public policy, although it was conceded that the Board of Transport Commissioners had the undoubted legal right to authorize the construction of a parallel line, duplicating the line built by Trans-Prairie. Later, Westspur sought to extend its gathering line to the newly discovered Florence field in the face of provincial opposition to premature construction of such a facility. In December 1957, the decision of the Board of Transport Commissioners frustrated the attempt, which all parties made voluntarily, to place gathering systems under provincial jurisdiction by rejecting the application of Westspur to transfer its gathering systems to Producers on the ground that such gathering lines could not be severed from an extra-provincial pipeline system.

These decisions have highlighted the jurisdictional difficulties affecting pipelines and have created apprehension that these difficulties may be extended and intensified unless immediate

steps are taken to clarify the respective areas of federal and provincial responsibility in this field.

Trans-Prairie joins with and endorses the comments made on the question of jurisdiction by the Province of Saskatchewan and specifically offers the following comments, based upon its own experience:

(1) So long as it is possible for a federal pipeline to be extended into an area served by a provincial line or, in the more unlikely circumstances, a provincial line to enter the area of a federal line, independent companies like Trans-Prairie are unnecessarily exposed to danger. Protection from competition by parallel lines cannot be assured.

(2) The decision in the recent Westspur -- Producers case raises doubt as to the constitutional position of a provincially incorporated company like Trans-Prairie operating for the sole purpose of gathering oil for delivery to an interprovincial pipeline system. While it is considered that the position of Trans-Prairie, as properly a creature of provincial jurisdiction, can be upheld, it is nonetheless a source of concern to the company. It is possible that this company's status may be challenged at an inopportune time and to the

great expense and inconvenience of the company and and its shareholders.

(3) The company views with considerable alarm the lack of mobility of pipeline assets. Small gathering units, initially incorporated in a federal pipeline system, are apparently forever precluded from incorporation in a provincial system.

It is respectfully submitted that basic national policy should be clearly re-stated. It should limit federal jurisdiction to main inter-provincial and international transmission lines and clearly reserve to the provinces juris-diction over gathering lines and all other types of lines located solely within the province.

It is realized that the solution to these jurisdictional problems by appropriate legislation presents difficulties. It is possible that a simple amendment to the Federal Pipe Lines Act attempting a clearer delineation of jurisdiction will not suffice. It may be that, in order to assure adequate provincial legislative authority in this field, some provision will have to be made as in the Motor Vehicle Transport Act (Statutes of Canada, 1953-54 c.59.) for the transfer of some federal powers to appropriate provincial regulatory agencies.

APPENDIX 1

TRANS-PRAIRIE PIPELINES LTD.

BALANCE SHEET

February 28, 1958

ASSETS

CURRENT ASSETS:

Cash in Bank		161,712.32	
Accounts Receivable		160,319.46	
Inventories - Oil in Line		57,468.95	
- Stock		102,165.60	
Prepaid Expenses		4,614.28	486,280.61

FIXED ASSETS:

Plant, Property & Equipment at cost			
- Virden	1,823,571.15		
- Weyburn	1,594,655.84	3,418,226.99	
Less: Allowance for Depreciation		668,136.42	2,750,090.57
			3,236,371.18

TRANS-PRAIRIE PIPELINES LTD.

BALANCE SHEET

February 28, 1958

L I A B I L I T I E S

CURRENT LIABILITIES:		
Accounts Payable	47,497.04	
Accrued Liabilities	15,974.50	
Provision for		
Income Taxes - 1957	94,615.30	
- 1958	83,550.46	241,637.30
DEFERRED LIABILITIES:		
Agreement for Sale (secured)		16,833.18
FIRST MORTGAGE SINKING FUND BONDS:		
Authorized and Issued, Series "A" due December 31, 1965		620,000.00
Sinking Fund Payment due December 31,1958	$80,000.00	
Authorized and Issued, Series "B" due January 15, 1973		1,000,000.00
Sinking Fund Payment due December 31,1959	$70,000.00	
CAPITAL:		
Common Shares without nominal par value:		
Authorized - 500,000 Shares		
Issued - 237,507 Shares		448,762.50
EARNED SURPLUS:		909,138.20
		3,236,371.18

APPENDIX II

TRANS-PRAIRIE PIPELINES LTD.

HISTORICAL SUMMARY OF TARIFFS

Tariffs in effect on dates shown

	Jan.1/55	Jan.1/56	Jan.1/57	Jan.1/58
MANITOBA:				
Daly	11¢	11¢	11 ¢	13 ¢
Virden-Roselea and North Virden	20¢	18¢	13 ¢	11 ¢
Truck Terminal		2¢	3 1/2¢	3 ¢
Woodnorth and East Cromer		25¢	25 ¢	25 ¢
Routledge				22 ¢

	Jan.1/57	Feb.1/58
SASKATCHEWAN:		
Medium Crude to Midale	19 1/2¢	17 ¢
Medium Crude to Halbrite	16 ¢	13 1/2¢
Light Crude to Midale	21 1/2¢	19 ¢
Light Crude to Halbrite	18 ¢	15 1/2¢
Trucked Oil unloaded at Halbrite, piped to Midale	8 1/2¢	8 1/2¢
Trucked Oil, unloaded at Halbrite, piped to Tank Cars	5 ¢	5 ¢

THE CHAIRMAN: Thank you, Mr. Brandt. Going back to page 8, what do you mean by "a fair return on investment capital"?

MR. BRANDT: Are you asking for a percentage of return?

THE CHAIRMAN: Yes.

MR. BRANDT: Sir, I think that is governed by many factors. Last year Trans-Prairie on its rate

base earned 11.4 per cent. Now, we don't think this return is unreasonable. We have several reasons, one of them being that we have no throughput guarantees; our proven reserves are approximately 100 million barrels as compared to the Interprovincial's proven reserves of about 3 billion barrels; and we had in addition a sharp decline in our reserves in Manitoba; they declined 41 per cent from December 31, 1956 to December 31, 1957. That represented 23 million barrels and we have no assured markets. If we could eliminate any one of these risk factors, then there would be, we believe, justification for further reduced tariffs. Our tariffs were last reduced on February 1, 1958, in Saskatchewan.

THE CHAIRMAN: You figure it out at 11 1/2 per cent, but I figure it close to 100 per cent when I look at your Balance Sheet. You have 237,000 shares with a book value of about $1.90, and the net return on those shares, after income tax and depreciation and everything is $1.76.

MR. BRANDT: You said we had a book value of what?

THE CHAIRMAN: On your shares here, 237,000, a book value of $1.90. The capital is $448,000; shares, 237,000; is that right?

MR. BRANDT: You are talking of retained earnings?

THE CHAIRMAN: Yes.

MR. BRANDT: Yes.

THE CHAIRMAN: Capital invested.

MR. BRANDT: I think, sir, our rate base is calculated on the basis of invested capital plus depreciation.

THE CHAIRMAN: You include in your capital your bonds and everything?

MR. BRANDT: No, I am counting my capital invested at cost. Our investment in our system as of February is $3,418,000, less depreciation of $668,000. The factor which you speak of on the common shares, I don't believe is considered in the rate base calculation.

THE CHAIRMAN: I know, but generally industrialists figure it out that way. We go on capital invested; we don't count bonds or anything--just the common shares. So, if you take your equity here, you have an invested capital of $400,000, and the profits last year were $400,000. That is 100 per cent; is that right?

MR. BRANDT: Well, I don't believe that we are at a common base as to a calculation of a rate base on what you earned. Whether I obtained the money to build the pipeline all from bonds or all from equity -- I don't believe that affects the rate base calculation. I think it still comes back to what it cost for the system, less depreciation.

THE CHAIRMAN: Well, we won't argue about that.

MR. BRANDT: I would like to be corrected myself if my interpretation is wrong.

MR. COMMISSIONER HOWLAND: On this point, I note you are depreciating your plant and equipment over a ten-year period?

MR. BRANDT: Yes.

MR. COMMISSIONER HOWLAND: Is this because of your skepticism about supplies?

MR. BRANDT: That is right. We anticipate the life of these fields will be about ten years.

MR. COMMISSIONER BRITNELL: It has nothing to do with the anticipated life of the line?

MR. BRANDT: If there are no further new discoveries I think it would also affect the life of the line.

Before we leave the Annual Report, if you will notice it is as of December 31, 1957, in the Appendix.

THE CHAIRMAN: I noticed the 1958 report for two months is still better. For the two months you had $100,000 net profit, so this year you will make $600,000 instead of the $400,000 last year. I think perhaps we will

adjourn now and start tomorrow morning at ten o'clock.

---Whereupon the hearing adjourned at 4.40 p.m. to resume at 10.00 a.m., Thursday, May 22, 1958.

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

WINNIPEG

MAN.

VOLUME No.: 45 DATE: MAY 22 1958

OFFICIAL REPORTERS
ANGUS, STONEHOUSE & CO. LTD.
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ANGUS, STONEHOUSE & CO. LTD.
TORONTO, ONTARIO

ROYAL COMMISSION

ON

ENERGY

Hearings held at Winnipeg, commencing Wednesday, May 21, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	-- Chairman
Mr. J.L. Levesque	-- Member
Mr. G.E. Britnell	-- Member
Dr. R.D. Howland	-- Member
Mr. L.J. Ladner, Q.C.	-- Member
Dr. R.M. Hardy	-- Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson	-- Secretary to the Commission.
Major N. Lafrance	-- Assistant Secretary to the Commission.

APPEARANCES

TRANS-PRAIRIE PIPELINES LTD (Cont'd)	6206
SASKATCHEWAN COAL OPERATORS Mr. C. M. Thomson	6235
HUDSON BAY MINING AND SMELTING COMPANY LIMITED Mr. M. A. Roche - Assistant to the Vice-President Mr.J.Hoskins,Q.C.- Counsel	6251
THE GREAT PLAINS GAS COMPANY LIMITED Mr. C. P. Bennett- President Mr.Moe Dimentberg- Secretary and Treasurer	6258

EXHIBITS

W-21-2-B	Prospectus of Trans-Prairie Pipe Line Ltd, dated September 14, 1954	6212
W-21-2-C	Notice to Producers of the Weyburn-Halbrite Field; allocation of purchases, April 1958	6218
W-21-2-D	Analysis of shareholders' list as at May 2nd, 1958, Trans-Prairie Pipe Line Ltd	6231
W-22-1	Brief of Saskatchewan Coal Operators	6235
W-22-2	Brief of Hudson Bay Mining and Smelting Company Ltd	6251
W-22-3	Brief of The Great Plains Gas Company Limited	6258

Thursday,
May 22, 1958.

---On resuming at 10.00 a.m.

---The Chairman was not present.

---Mr. Commissioner Britnell and Mr. Commissioner Howland present.

---Mr. Commissioner Levesque in the Chair.

THE CHAIRMAN: Gentlemen, the Commission will now resume its hearings. Mr. Patterson, will you carry on?

MR. PATTERSON: Thank you, Mr. Chairman.

In reviewing the Trans-Prairie submission I propose to follow the brief quite closely and develop and discuss with the gentlemen from Trans-Prairie certain statements that appear in the brief in the order in which they are set out there. When I direct a question to you gentlemen any one of you may answer it and if you wish you may go into a huddle.

Would you then turn to page 1 of the brief and give me a little more detail in regard to the statement at the bottom of the page which reads:

"The construction of this pipe line was
"undertaken originally by an independent
"group when the large producing companies

"interested in the field showed no
"interest in the early development of
"a pipeline system."

Can you tell me who were the independent group and who were the large producing companies interested in the field?

MR. BRANDT: The largest producer in the area that was producing about 60 per cent crude at the time was California Standard. The independent group was headed by a man named Charlie Shaw. He built the pipe line and it was in the ground and inoperative until our group took it over in the late fall of 1953. California Standard claimed that they would rather invest their money in exploration and production; they had no interest in the transportation system as such. It may be pointed out here also that when we did our financing of the pipe line we offered equity interest in the pipe line to the producers in the area and excepting one or two occasions, a very minority interest, they refused in every case.

MR. PATTERSON: Taking that aspect of the matter up, that is, offering equity interest to the producers, is it still your thinking that for expansion purposes of your company you would make the same kind of offer?

MR. BRANDT: Well, we feel now that probably equity interest in pipe lines to major oil

companies could in Canada be limited due to the fact that they are having a greater growing control and their interest would be only to further prevent the further control of the major companies.

MR. PATTERSON: That is, any offer you were to make you would exclude the major companies?

MR. BRANDT: Well, certainly limited in purchase.

MR. PATTERSON: Now, can you give me, aside from the examples which you mentioned, over the period, could you give me any other examples of fields anywhere in Western Canada in which the pipe line development was either delayed or ignored by major producing companies and independent groups or independent pipe line companies took over the job?

MR. BRANDT: Yes, Mr. McDonald had something to do with the financing of a couple of those.

MR. McDONALD: We can give you the exact dates, Mr. Patterson, later, and I will just speak from memory here. I have one specific case, the Sturgeon Lake area in the Peace River district. As the field started to develop an independent group in Calgary called the Consolidated Gathering Systems and made application to the Alberta Conservation Board for the right to build that line and connect it with Trans-Canada at Addison, Alberta. The hearings were called and they were

not represented by any production interests in their equity ownership of Consolidated. At the initial hearings of the Alberta Conservation Board the large producers in the field -- I think they were headed by Gulf which is now B-A -- made representations to the Board that the pipe line to serve the Sturgeon Lake field was premature and they individually and as a group asked that this application be postponed for a period, if my memory serves me, of six months. At that time Consolidated had all their engineering and their economic feasibility reports and were not heard by the Conservation Board because of the request of the producers in the area.

At the reconvened hearings which, as I remember, were about six months later the major producers in the area appeared with an application to build a pipe line and contested the application of Consolidated and were granted the permit to build. That is one specific case.

MR. PATTERSON: While you happen to be talking will you turn to page 3 where you mention that the Trans-Prairie Pipe Line system is one of the very few built without the benefit of any throughput agreements. First of all, are there any others built without the benefit of throughput agreements?

MR. McDONALD: I think Pembina is the

only large one.

MR. PATTERSON: And the Commission has been advised that throughput agreements are pretty much an essential. How did you make it without them?

MR. McDONALD: Well, we had difficulty getting a precedent to work on in looking at how to set up a pipe line without a throughput agreement. We held discussions with the Government that we could not represent this pipe line as a debtor security because we had no known obligations to offset any debt obligations on the other side, so we set the financing of this pipe line up which at that time was estimated to cost in the neighbourhood of $900,000 on a preferred issue and a common issue. We felt it was fairer to represent it as somewhat of a speculation and the preferred shares were offered on a basis of 5 preferred at $5 plus one share common as a bonus, and that is the way the company was financed and the subscriptions for the shares came, in the original interests, almost entirely from the three western Canadian provinces. We did not get any support in Eastern Canada.

There was a provision in the conditions of the preferred shares -- there was an accelerated requirement of these shares based on the company -- well, the fields expanded much more rapidly in

Manitoba that had originally been considered possible and earnings came in behind this preferred issue to the point in 1956 when it became possible to arrange the financing of this company in a more orthodox style in conformity with other pipe line financing in Canada.

At that time, because of our profit experience and throughputs that were going through the line, it was possible to borrow money on a debt basis and retire the preferred and get back to, I think, at that time, the 60-40 debt equity ratio, and we have maintained that ratio -- had no difficulty with raising debt money.

MR. PATTERSON: Your own experience and affiliations with respect to finance are what?

MR. McDONALD: I am manger of the underwriting firm of Osler and Hammond, and director of the firm.

MR. PATTERSON: Would you mind filing with the Commission copies of the prospectuses?

MR. McDONALD: I have one here and the date is on the last page.

MR. PATTERSON: May we mark as Exhibit W-21-2-B, although this is the 22nd in date we have the sequence of matters referring to Trans-Prairie, the prospectus of Trans-Prairie Pipe Line Limited, dated September 14th, 1954.

---EXHIBIT NO. W-21-2-B: Prospectus of Trans-Prairie Pipe Line Ltd dated September 14, 1954.

MR. PATTERSON: Now, turning to page 5, you mention in the second paragraph that 96.7 per cent of the common shares are owned by Canadians. Do you have any major oil companies or do you have any significant ownership by the so-called independent producing oil companies?

MR. BRANDT: No, sir.

MR. PATTERSON: Does the company have any interest directly or indirectly in oil production either by its share holdings or through ownership?

MR. BRANDT: It does not.

MR. PATTERSON: And does the company have any interest by ownership or through shareholdings in refining?

MR. BRANDT: It does not.

MR. PATTERSON: So in calling yourself an independent pipe line you are sealed off top, bottom and sideways from the rest of the business?

MR. BRANDT: That is correct.

MR. PATTERSON: On page 6 in your discussion of the control by international oil companies of pipe lines you suggest at the bottom of the page that control of transportation facilities has been a key weapon of major oil companies in retaining control of the market. First of all,

I take it that you mean the crude oil market?

MR. BRANDT: That is right.

MR. PATTERSON: And how do you think there is, as to control of the crude oil market, how do you think that obtains in the situation such as is found in Alberta under pro rationing? To what extent does ownership of a pipe line affect sales by oil companies of their own oil where there is pro rationing?

MR. BRANDT: Under pro rationing I feel that it is minimized, the amount of control that is exercised,but they can exercise control by not expanding facilities of pipe lines to fields which could enjoy partial control.

MR. PATTERSON: That is, you are suggesting that they could exercise control by not expanding pipe lines to fields in which they did not have production?

MR. BRANDT: That is correct.

MR. PATTERSON: And would you suggest there is any other method of control even under pro rationing or control in the sense of ensuring that a major oil company is buying its own oil from the field?

MR. BRANDT: I believe that in Alberta the refiners nominated the type of crude which they wished to use in their refineries. It is conceivable if a major oil company is an owner in

the field nominating that type of crude that he produces in his field connected by these pipe lines, then in that instance he could exercise control.

MR. PATTERSON: You do not suggest these matters you mention are other than dangerous -- you do not suggest they exist?

MR. BRANDT: I believe the major oil companies have been very careful in the past to avoid any criticism of this nature, but I think the dangers are very real.

MR. PATTERSON: In fact, would it not be fair to say that the Imperial Oil supporting the interprovincial pipe line gave a market, an expanded market, to Alberta producers particularly?

MR. BRANDT: That is correct, they have a large interest in production.

MR. PATTERSON: Now, what about the same question in the Province of Saskatchewan where we do not have pro rationing? Do you think that ownership of the pipe line can be or is used as a weapon, as you mention at the bottom of page 6, in Saskatchewan?

MR. BRANDT: We have an example in Saskatchewan. Trans-Prairie, as you know, has a pipe line from the Weyburn-Halbrite field. This field produces two types of crude. Part of it is about 30 degrees crude and the other is

about 27. It has roughly the same characteristics as Midale crude which is a field at the western extremity ---

MR. PATTERSON: Those two fields you are now describing, could you just point them out on the map?

MR. BRANDT: Yes. Here is the Weyburn field and here is the Midale field.

MR. PATTERSON: Having done that do you mind coming back to the microphone?

MR. BRANDT: The north half of the Weyburn field produces light crude which has enjoyed an unrestricted market in Saskatchewan to date aside from, I believe, about a 15 per cent cutback in the months of March and April. This production by Imperial Oil and the Western oil is shipped further east. The medium crude has been in the distress category ever since it was discovered in Saskatchewan. We have an MPR in the Weyburn field of approximately 56,000 barrels a day; the MPR in the Midale field is approximately 25,000 barrels a day. A major oil company which has been purchasing production in the area has specified Midale crude. Now, the allocations that we receive from the -- I can give you some statistics on this -- in the month of February Weyburn produced 24 per cent of its MPR, Midale 26 per cent. In March Weyburn produced 17 per cent of

its MPR and Midale 27 per cent. In April Weyburn produced 15 per cent of its MPR and Midale 35 per cent. In May we are producing 20 per cent of our MPR in Weyburn and Midale is producing 35 per cent.

MR. PATTERSON: Well, as a gathering facility are you instructed by the purchaser to carry out in effect sort of pro rationing for him by taking the purchases from the two fields as you mentioned?

MR. BRANDT: Well, we gather from the Weyburn field and Westspur gathers from the Midale field and we are instructed by the producer each month to allocate to each company a certain number of barrels according to his percentage of MPR in the field.

MR. PATTERSON: That is by each company in the case, you mean each company producing in the Weyburn field?

MR. BRANDT: That is right.

MR. PATTERSON: Well, then, does the purchaser give instructions to you and to Westspur which in effect amounts to a decision by the purchaser as to how much he will take from either of the two fields?

MR. BRANDT: That is right. Would you like me to file with you a sample allocation?

MR. PATTERSON: Yes, if you could do that it would be useful information. Perhaps if

it is not handy you could send it in to us.

MR. BRANDT: I will file the one for April. I will keep my copy for March.

MR. PATTERSON: Thank you.

MR. PATTERSON: I suggest that this document, which is entitled, Great Northern Oil Purchasing Company, Notice to the Producers of the Weyburn-Halbrite Field, allocation of purchases, April, 1958, and consists of three sheets which also deal with the Midale field, be marked Exhibit W-21-2-C.

---EXHIBIT NO. W-21-2-C: Notice to Producers of the Weyburn-Halbrite Field; allocation of purchases, April 1958.

MR. PATTERSON: Do you know of your own knowledge the extent of interests of Great Northern or its affiliates in either of the two fields -- Weyburn and Midale?

MR. BRANDT: Great Northern is acting as purchasers of crude. They have no interests in production that I know of as such. I think they are a subsidiary of Woodley Coal and Oil.

MR. PATTERSON: On the bottom of page 7 and the top of page 8 you mention the forms of discrimination which you suggest might exist in producer-owned pipe lines: under the situation as it now exists in Canada, do you believe that aside from the items that you have mentioned there is any serious denial of access or erection of reasonable conditions as to minimum tender and quality in Canadian pipe lines?

MR. BRANDT: If they historically follow

the pattern of the United States, then they have that danger.

MR. PATTERSON: On page 9 you suggest one of the values of independent pipe lines is their initiative in developing new fields and markets, and you told us something about the development of new fields, but what part can, first of all,a pipe line which is really in the main a field gathering system play in development of markets?

MR. BRANDT: I think that a gathering system would play a very small part in finding new markets. I do feel that an independent pipe line which is serving refinery areas would play a very important part in finding new markets due to the fact that its very life would depend on the refineries that it serves, and its growing and existence. Therefore, they should seek new markets.

MR. PATTERSON: You are suggesting there that an independent interprovincial pipe line that is dependent solely on throughput for its revenue?

MR. BRANDT: That is correct.

MR. PATTERSON: . . . would be inclined to be constantly prodding refineries to take more oil?

MR. BRANDT: Yes. If a pipe line is owned by producing companies that have other sources of income, then it would let the pipe line company

take the oil as it saw fit, and not be concerned with its existence just as a transportation company.

MR. PATTERSON: Really, what you are suggesting is that the contention that has been made in evidence before the Commission in previous hearings, that it is of great importance to pipe lines to have share ownership by producers, is not entirely correct?

MR. BRANDT: That is correct.

MR. PATTERSON: And that, I think, at page 10 you say that development of a Canadian oil industry, in effect, will not be hampered if control of pipe lines is given to independent companies, and in that you have a reference, really, to the brief of the Interprovincial Pipe Line Company put before the Commission?

MR. BRANDT: That is correct.

MR. PATTERSON: On page 11 you suggest that independent pipe lines are the natural allies of independent producers in their constant striving to expand and develop Canadian oil production. Then you go on to say that the interposition of independent pipe lines in the nationwide network of producing, transportation and refining could disrupt and control the otherwise complete monopoly exercised by international companies. It has been suggested to us in evidence that a

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pipe line is really a facility of the producing industry, and it should be left to the producing industry to work. Now, how do you see in a situation in which the major refiners are also major producers there can be injection of competitive influences simply by having the pipe line owned by an independent pipe line company?

MR. BRANDT: We feel that we have to begin the breaking of the complete control some place, and we think the pipe line is the most effective place. However, it can be done also by creating an area of more competition for refineries or even in the production and the owning of leases and mining. However, the pattern is now following one in which they will soon dictate all the policy.

MR. PATTERSON: Again, have you found in your dealings with independent producers that they are doing any real striving to extend markets and are concerned about having independent pipe lines or independent refiners in existence?

MR. BRANDT: I don't think that independent producers as such in Canada are doing anything to find new markets, but I think in the world picture they are certainly becoming very active.

MR. PATTERSON: On page 15, in a paragraph there, you say that Trans-Prairie has been

frustrated in attempts to expand; who frustrated you?

MR. BRANDT: Well, the first instance of all our frustrations took place in Ottawa before the Board of Transport Commissioners when we endeavoured to extend our area of service from Cromer, Manitoba, into Southeastern Saskatchewan. We were one of the unsuccessful applicants. We have since then, on other occasions, tried to serve refineries in isolated areas by pipe line and have been refused any assistance by major oil companies in our proposed lines. I am referring specifically to the Sturgeon Lake area again, where we proposed a pipe line from the Sturgeon Lake area to Grande Prairie and Dawson Creek. Peace River Pipe Line has a pipe line that runs from Sturgeon Lake to join Trans Mountain, and they have a pumping station and receiving station at Sturgeon Lake. We wanted to buy crude at that point and ship it to Grande Prairie and Dawson Creek. We asked the pipe lines if we could buy the oil by paying the gathering charges, and they sent us a letter back which includes only their tariff from Sturgeon to Trans Mountain, which indicated there was no concession and that we had to pay the full price from Sturgeon to Trans Mountain, which made our pipe line uneconomic.

MR. PATTERSON: You go on and suggest in the same paragraph that for the company to survive it is imperative it should have an opportunity to offer its services in new fields as they develop: in using the word "survive" am I correct in assuming that you have in mind there that your Weyburn pipe line, I believe it is, probably has a life of about ten years by reason of the fact that the reserves will be pretty much used up at the end of that time?

MR. BRANDT: I would suggest that Weyburn will probably be a little longer period than that. Certainly, the Manitoba production does not look like being in excess.

MR. PATTERSON: And it is in that sense that you are using the word "survive"?

MR. BRANDT: It is a very real one too. In Manitoba, if there are no further discoveries, we will have a pipe line in the ground which is not carrying oil.

MR. PATTERSON: On page 17 you suggest that there is a tendency on the part of producer-owned pipe lines to propose depressed tariffs, and then you say that after the proposed depressed tariffs it is not too certain when the producer-owned pipe line is given whatever franchise and authorities it needs that it does, in fact, give the producers advantage of the low rates suggested. Have you examples of that type of thing?

MR. BRANDT: To come back again to Ottawa in 1955 -- Westspur -- they didn't actually propose a tariff, but they suggested tariffs that could be charged,and what the earnings of the company would have been under those circumstances. The tariffs which they proposed have never been in effect, to my knowledge.

MR. PATTERSON: And from your knowledge do you think the profits they are making are higher than those they suggested in those hearings?

MR. BRANDT: Westspur Pipe Line is in a period, as we are aware, of high expansion, and I think their profits, because of depreciation -- and they have an accelerated depreciation, as we do -- they have not shown excess profit.

MR. PATTERSON: On page 19 you suggest that public policy -- and I think it is paragraph No. 1 of your recommendations -- should encourage development of independent pipe line companies: how would public policy encourage that development other than perhaps preventing parallel lines?

MR. BRANDT: Do you refer to the policy that will be set by the Government, or the Commission? I don't quite follow your question.

MR. PATTERSON: Well, I am referring to a statement you make that it should be the primary and positive aim of public policy to

encourage development of independent pipe line companies. Now, by "public policy" I assume you mean, first of all, federal, provincial and municipal governmental policy?

MR. BRANDT: We think that policy should be that of regulatory boards or of bodies that are granting franchise. We feel they should grant them to independent pipe lines.

MR. PATTERSON: In so far as the independent pipe line is on an equal basis and its tariff structure and ability to perform the service: is that what you are suggesting?

MR. BRANDT: Yes, equal obligations which apply to all pipe lines.

MR. COMMISSIONER BRITNELL: I am not quite clear on that. Do you mean that all other things being equal the franchise should go to the independent company?

MR. BRANDT: Yes, sir.

MR. PATTERSON: On the jurisdictional problems briefly for a moment, page 23, you suggest that the basic national policy should limit federal jurisdiction to main provincial and international transmission lines, and clearly reserve to the province jurisdiction over gathering lines and all other types of lines located solely within the province. From further on in your brief I take it that you don't think a complicated definition

of what "main interprovincial pipe lines" may mean is the answer. Is it your thinking that by some form of legislative action, such as under the Motor Vehicle Transport Act, or by federal-provincial agreement, specific projects could be designated and it could be agreed between provinces and the federal Government that from point A to point B on a pipe line it is under federal jurisdiction, and from point C to point D it is under provincial jurisdiction?

MR. BLAIR: Yes, that is the submission we make; and the example which we had in mind is what occurred at the end of last year where, as we understand it, all the authorities concerned -- the Federal Government, the Government of the Province of Saskatchewan and the various companies -- all came to the conclusion that it was desirable that the gathering systems serving the Westspur pipe line should be put under provincial jurisdiction, and an application was made to the Board of Transport Commissioners for this purpose, and the Board found that, as a matter of law, it was impossible for the gathering lines to be severed from the federal system of which they then formed a part, and for what our opinion is worth, we feel that the solution to this controversy does not lie in litigation or in too elaborate demands of definition of federal legislation, but rather

in a provision of some legal framework within which the authorities can cooperate by agreement to designate particular areas as being under federal or provincial jurisdiction.

MR. PATTERSON: Turning to the question of independent pipe lines on an international or interprovincial scale, is it your thinking that without the backing of major companies and their interests in the projects -- such projects as, say, Interprovincial or Trans Mountain pipe line -- could have be built at all?

MR. McDONALD: As far as Interprovincial is concerned, which was the first major financing in Canada, in my opinion, it could not have been financed without the throughput agreements and deficiency agreements that Imperial Oil gave that company to start with, because that time was a period in which the investors in Canada had basically no past experience to go on, and I would think that the same applied to Trans Mountain. In my opinion, neither one would have been possible without the support of the major.

MR. PATTERSON: Are you suggesting that perhaps the investment plan has changed; that now if there is another major pipe line to be built in Canada there would be acceptance by investors of an independent pipe line without the ramifications of throughput and deficiency agreements from

refiners?

MR. McDONALD: Well, this is a pretty hypothetical question. I would, in my opinion, say that the atmosphere of investment in pipe lines is much more favourable than it was in 1949. I haven't looked at the economics of any independent line without these throughput agreements. I would think, just as an offhand opinion, that quotas or a protection of some kind would have to be afforded pipe lines crossing into, for instance, Chicago before they could be acceptable as investments in Canada. As I say, I haven't studied the economics of it.

MR. PATTERSON: Those are all the questions I have, Mr. Chairman.

THE CHAIRMAN: Mr. McDonald, would you have a prospectus of your last issue -- that $1 million issue?

MR. McDONALD: No, sir.

THE CHAIRMAN: Well, you have to file a prospectus with the Provincial Secretary?

MR. McDONALD: No, you don't have to. We have prepared an offering later for the institutions, which I am pretty sure we can file with you, sir. It was not filed with the Provincial Secretary.

THE CHAIRMAN: But one was issued?

MR. McDONALD: Yes, there was a memorandum.

MR. BRANDT: There was a memorandum prepared which followed very much the prospectus. There was a single institutional purchaser, and therefore the requirement of filing did not apply.

THE CHAIRMAN: Would you file one with the Commission?

MR. BRANDT: Yes, sir.

MR. COMMISSIONER HOWLAND: I have just one or two questions. I don't seem to have got much information in the back of my mind as to who owns the equity capital in your company. Is this already given to us? I don't seem to have had it. Could you enlarge on that?

MR. BRANDT: We will file a list of our shareholders, if you wish. We had one taken off in 1958.

THE CHAIRMAN: Could you tell me roughly how many shareholders -- five hundred or one thousand?

MR. McDONALD: It strikes me it is between eight hundred and one thousand; somewhere in there.

MR. COMMISSIONER HOWLAND: Is this indicating that the control is as diverse as the spread of the shares?

MR. McDONALD: No.

MR. COMMISSIONER HOWLAND: I would like to have some indication of where the controlling

shares are.

MR. McDONALD: I think there is no one shareholder who controls 50 per cent of the equity.

MR. COMMISSIONER HOWLAND: Well, would you break it down?

MR. McDONALD: We have a geographical breakdown, and by size of holdings.

MR. COMMISSIONER HOWLAND: On page 18, this question of income tax allowance on the easements of the right-of-way: if there were a regulated base rate on which earnings were made, would this question be of any moment at all? What I am getting at is, if this was allowed as an expense, and you are then allowed to charge it in your tariff structure, where does the income tax question come in? You can't have it both ways -- or am I wrong?

MR. McDONALD: I think the point as far as income tax is concerned is that this would be moved into the fixed asset section of the balance sheet along with planning, and therefore would be depreciated as a charge against operation. As it is now it would appear in our balance sheet as land, which must stay a constant figure.

MR. COMMISSIONER HOWLAND: I am just trying to understand that.

MR. McDONALD: We would be moving this into the category of pipe, even though it is an

easement.

MR. COMMISSIONER HOWLAND: If there was a regulating base?

MR. McDONALD: Yes. I have here an analysis of the shareholders' list as of May 2nd, which breaks it down as to the number of shareholders, in percentage number of shares, by each of the provinces of Canada, and non-resident shareholders by country, which we can file now, and we will give you the shareholders' list later.

MR. PATTERSON: May we mark the analysis of shareholders' list as at May 2nd, 1958, Trans-Prairie Pipe Lines Limited, as Exhibit W-21-2-D?

---EXHIBIT NO. W-21-2-D: Analysis of shareholders' list as at May 2nd, 1958, Trans-Prairie Pipe Lines Ltd.

MR. COMMISSIONER HOWLAND: Just a general question on your comments on federal policy: do you really feel that it would be sound policy that all pipe lines should come under some form of regulation in terms of rate basis and procedures of accountancy, and so on: I am not quite sure -- sometimes you seem to be very much in favour -- I think there is one paragraph here which tells me you are quite clearly in favour of regulation of all pipe lines, not only as to rate basis but as to where they go; and the next minute I am

MR. COMMISSIONER HOWLAND: I gather here that there is a measure of control in the unplanned way of the Canadian? You do not have two pipe lines running over the top of each other or criss-crossing, and this you think is good?

MR. BRANDT: Yes, that is right.

MR. COMMISSIONER HOWLAND: Do you foresee in the growth pattern any tendency to get away from that type of policy if there is not a further regulatory authority or have you confidence that our own system at the moment is working pretty well?

MR. BRANDT: We feel that the danger of it does exist. However, I think that if it follows the base pattern it would be all right. I do not know that there is any insurance on that.

MR. COMMISSIONER HOWLAND: Thank you, Mr. Chairman.

THE CHAIRMAN: Mr. Brandt, we thank you and your colleagues very much for presenting this brief which will be filed at Ottawa where we will have a lot more time to study it.

MR. BLAIR: We might interject for a moment, we would be glad to file with the Commission an accounting calculation showing the computation of our tariffs on a rate basis, rate return basis. This was raised at the conclusion of yesterday's testimony and we would be prepared to file a proper exhibit which might assist the

Commission.

THE CHAIRMAN: Is it the same thing as on the last page?

MR. McDONALD: No, that is the published tariff. What we propose filing with the Commission is a plan of rate of return.

THE CHAIRMAN: Very well, thank you very much. We thank you once again. It was a pleasure to have you here.

I think it is a good time to have a short break and we will start in ten minutes with the Saskatchewan Coal Operators.

---Short recess.

Submission of

SASKATCHEWAN COAL OPERATORS

Appearances:

Mr. C. M. Thomson

THE CHAIRMAN: We will now resume our hearings starting with the Saskatchewan Coal Operators.

MR. PATTERSON: The brief of the Saskatchewan Coal Operators will be presented by Mr. Thomson and the brief will be marked as Exhibit W-22-1.

---EXHIBIT NO. W-22-1: Brief of Saskatchewan Coal Operators.

MR. PATTERSON: Mr. Thomson, will you proceed to read the submission, please?

MR. THOMSON: This submission is made on behalf of the major coal operators of Saskatchewan representing approximately 90 per cent of the coal output of that province. The reason it is being presented at Winnipeg rather than Regina is that we did not know in sufficient time that your Commission would be receiving submissions on other than the oil and natural gas aspects of the energy situation at this time.

Our desire in presenting this submission

to you is to indicate the importance of the coal mined in Saskatchewan so far as the general energy position of Saskatchewan and Manitoba is concerned.

We do feel, however, that any report which may be in any way an interim report, must of necessity take into account all forms of energy, and we would therefore urge upon your Commission that the inter-relationship of all forms of energy be recognized in such interim report.

Below is a table of the production of coal in Saskatchewan for the past number of years. The shipments of the past two years have been indicated as to area destination.

COAL PRODUCTION IN SASKATCHEWAN

Year	Tons
1948	1,702,886
1949	1,535,636
1950	2,114,106
1951	2,223,372
1952	2,188,390
1953	2,157,612
1954	2,046,821
1955	2,124,398
1956	2,341,641
1957	2,248,312

COAL SALES - SASKATCHEWAN

1956 and 1957

Year	Shipped to Ontario	Shipped to Manitoba	Shipped to Saskatchewan
1956	260,194	1,225,276	755,844
1957	292,661	1,140,161	751,216

From this it will be seen that the tonnage of the Saskatchewan field is a most important one to the provinces of Saskatchewan and Manitoba. Dealing with the energy point of view, out of a total coal available for consumption in Saskatchewan in 1956 of 1,647,848 tons, Saskatchewan lignite accounted for 755,844 tons or approximately 46 per cent, and in the same year, out of a total coal available for consumption in Manitoba of 1,826,703 tons,

Saskatchewan lignite accounted for 1,225,276 tons, or 67 per cent. The corresponding figures for 1957 are for Saskatchewan, out of a total coal available for consumption of 1,432,795 tons, shipments from Saskatchewan lignite mines accounted for 751,216 tons or approximately 52 per cent, and for Manitoba, a total of coal available for consumption of 1,654,678 tons of which 1,140,161 tons were shipped from Saskatchewan or approximately 67 per cent.

One of the reasons for the importance of Saskatchewan lignite is its low cost per million BTU. At the average price received at the mine, the cost per million BTU is less than 15 cents. Even with the freight added (which in most cases is more than the cost of the coal at the mine), the cost f.o.b. cars at destination is generally less than 35 cents per million BTU. It is significant to note that over the past ten years, there has been little increase in the price of Saskatchewan lignite coal at the mine despite continually increasing costs of all items. This price has been maintained through the use of larger and more efficient equipment thus increasing the tons per man day. There are, however, practical limits beyond which the industry cannot go.

We now find ourselves facing extreme competition from natural gas. We anticipate that

this will be evident in two ways -- (a) direct competition from natural gas installations, and (b) competition from oil displaced by natural gas.

Both of these types of competitions are now being felt and we anticipate considerable loss of tonnage in the future. A portion of this will be in the market for our domestic sizes but considerably more will be in the industrial market. Just how much loss will take place will depend, of course, on the price of the competing fuels. We realize that we will be faced with extreme competition from natural gas but we submit that it would not be in the ultimate interest of either the country, the producing area, or the consuming areas, to permit these competing fuels to be sold, in the initial stages, at prices which will not continue. In other words, our position is that neither natural gas or oil, both premium fuels, should be sold at "bargain-basement prices" which obviously cannot be a long term factor. The inevitable result of such would be that the industry in Saskatchewan would suffer at the outset and then when the requirement for this coal would be evident in the future, the industry would have to be built up again at a very high cost.

We beg to submit to your Commission our recommendation that some energy authority be established by the Government of Canada and that

it take full recognition of the inter-relationship between all forms of energy available in Canada. We are not prepared to recommend whether the entire field of the energy authority's activities should be regulatory as well as advisory but to the extent that any form of energy when consumed has an element of transportation involved, we believe that that portion of the particular type of energy should be subject to a similar sort of regulation as is imposed by the Board of Transport Commissioners, and as above, we do not feel that it is in anyone's interest, the consumer included, to have, for example, natural gas sold at prices which do not cover the full cost of providing the service.

THE CHAIRMAN: Thank you, Mr.Thomson.

MR. PATTERSON: Mr. Thomson, you mention on page 4 at the end of the last paragraph that after losing out to gas initially the coal industry would have to be built up again at a very high cost: is this statement really true as to high cost with respect to the strip mining operation? Is it not more applicable to underground mining?

MR. THOMSON: Yes, it is but if the industry finds itself in a position where it cannot continue then to start up again will require high cost because equipment for strip mining is

very expensive.

MR. PATTERSON: But you do not have the safeguarding expenses faced by underground mines?

MR. THOMSON: Not to the same extent, no.

MR. PATTERSON: Now, is it fair to say that there is no great difference between coal and gas prices at the points of consumption of your coal?

MR. THOMSON: At the moment I do not think there is complete clarity as to what the gas price at the point of consumption is. They are not sure yet.

MR. PATTERSON: Do you think to the extent that coal may lose out the decision is not so much one of price as it is based on other factors such as lower operational cost to the consumer, convenience of handling, and so on?

MR. THOMSON: The convenience factor will be a predominant one industrially. I question the fact that there are any other advantages other than the cost attributable to natural gas. Modern equipment can burn coal and burn it as efficiently, if not more so.

MR. PATTERSON: At the moment as far as a comparison of the laid-down price of coal with the dollar price of natural gas in the Winnipeg

area, I suppose you would have to answer an inquiry to make such a comparison by saying that the situation as to the dollar price of natural gas is not yet clear enough for you to compare the two?

MR. THOMSON: That is right.

MR. PATTERSON: Thank you, Mr.Chairman.

MR. COMMISSIONER HOWLAND: Mr. Thomson, on page 1 you say that the brief is on behalf of the operators who produce 90 per cent of the production in Saskatchewan. I presume that refers to the two companies, yours and the Great West Coal Company?

MR. THOMSON: That is right.

MR. COMMISSIONER HOWLAND: What percentage of the sales of these two companies go to domestic or industrial sales?

MR. THOMSON: Roughly 60 per cent industrial, 40 per cent domestic.

MR. COMMISSIONER HOWLAND: And where is your 40 per cent domestic largely, in Manitoba or Saskatchewan?

MR. THOMSON: I would think the larger portion of it would be in Manitoba.

MR. COMMISSIONER HOWLAND: Is that in the rural areas or in the cities?

MR. THOMSON: Both the rural areas and the cities. There is a very substantial market in the City of Winnipeg.

MR. COMMISSIONER HOWLAND: What is the position now regarding subvention aid to Saskatchewan for coal?

MR. THOMSON: It exists for shipments to Ontario amounting to, I believe, 20 per cent of the freight rate to the maximum of $1 per ton.

MR. COMMISSIONER HOWLAND: Is that such that it must go across the Ontario border?

MR. THOMSON: Yes.

MR. COMMISSIONER HOWLAND: And you can then reach into Ontario as far as $1 a ton will take you?

MR. THOMSON: As far as the economics of it will move you. I believe there is a limitation as to the eastern areas to which that coal can go.

MR. COMMISSIONER HOWLAND: And what type of sales are you getting in Ontario?

MR. THOMSON: The sales made to Ontario are purely industrial under subvention; subvention to Ontario applies only to industrial coal.

MR. COMMISSIONER HOWLAND: And it is largely to the pulp and paper?

MR. THOMSON: Pulp and paper.

MR. COMMISSIONER HOWLAND: With the gas pipe line going through that area -- or does it go through that area?

MR. THOMSON: It does go through that

area and the other company joining with us is losing two of its large accounts to natural gas.

MR. COMMISSIONER HOWLAND: Now, as a matter of fact, when the Trans-Canada pipe line reaches these points, is this part of the Crown Corporation pipe?

MR. THOMSON: I believe the Crown Corporation's pipe only goes on the northern part of Lake Superior, does it not?

MR. COMMISSIONER HOWLAND: Well, I am a little lost myself.

MR. THOMSON: I am not positive, but I think so.

MR. COMMISSIONER HOWLAND: Now, your fellow operator here is losing an account?

MR. THOMSON: Yes.

MR. COMMISSIONER HOWLAND: To this gas. Have you any indication as to the competitive price of gas?

MR. THOMSON: I am sorry, I do not have that but I can arrange to have it in your hands.

MR. COMMISSIONER HOWLAND: I would like to see that. As I take it, you feel that the real problem is going to be losing these kinds of accounts for the so-called interruptible gas -- I would like, when you are finding that out, if you will find out whether it is an interruptible contract or whether it is a straight supply.

MR. THOMSON: I think one of our fears is in the earlier instances that the original and so-called interruptible right in effect becomes a full-time right on which the load of the line had been built up with more lucrative business. I think that is one of our worries and one of our problems.

MR. COMMISSIONER HOWLAND: Well, as a business man you would really not find fault with anybody selling gas to a customer if they could sell at a profit?

MR. THOMSON: Providing they are selling at a profit.

MR. COMMISSIONER HOWLAND: Well, if you look at it as an overall situation, is there anything wrong in that they might take a loss leader and carry on; would you object to that?

MR. THOMSON: I think we have had a considerable amount of discussion among citizens about loss leaders and I do not think loss leaders are a proper basis as far as general business is concerned -- personally I do not like it.

MR. COMMISSIONER HOWLAND: I am not expressing any opinion, but what is the answer to this? If it is a profitable procedure on the part of a gas pipe line, if it is part of their set-up, can you foresee anybody in a Government body regulating or stopping such sales?

MR. THOMSON: It may be difficult to do but we think it would be desirable to do from the general viewpoint of the whole energy picture.

MR. COMMISSIONER HOWLAND: Well, let me carry on. I can understand it may be undesirable for the coal operators but you said it was undesirable for the broader picture. Would you develop that?

MR. THOMSON: To the extent that the energy available in the country forms part of a total picture I really do not think it is desirable to see a part sold at a price which will not continue. You speak of interruptible rates which provides a limited service for those rates. If the service is truly interruptible then the rate perhaps -- and I say perhaps -- it is just as bad to have a rate -- and again we are speaking of natural gas -- quoted on an initial installation and the industry equips to burn that fuel and in a short period of time finds that it is unable to continue purchasing at that low rate and then they must of necessity make other arrangements.

If a form of energy can be supplied over a period of years, many years, at a lower rate than coal can compete with then we as coal people would have no reason to object, but where in the original circumstances the price supplied cannot

be maintained or will not be maintained, then we feel it should not take place.

MR. COMMISSIONER HOWLAND: Well, my recollection of the Saskatchewan operators is one of great admiration, if I may say without flattery, because this is the one coal field which demonstrated a terrific ability to market coal as well as mine it. What is new in this story, you took hold of American coal and pushed it out of Winnipeg and then my recollection is Alberta got pushed out by Saskatchewan. Now, under these conditions you feel that you are not going to be able to buy. I hope your profits are still healthy, but foregoing a little profit you cannot meet this type of competition. Is that the essence of the matter?

MR. THOMSON: Yes, sir.

MR. COMMISSIONER HOWLAND: And is this because you feel that the gas pipe line people will sell gas at any rate above the cost of purchase in the field?

MR. THOMSON: Shall we say we are afraid, perhaps ---

MR. COMMISSIONER HOWLAND: But there is no precedent yet?

MR. THOMSON: Nothing at the moment.

MR. COMMISSIONER HOWLAND: Except possibly the one that ---

MR. THOMSON: I have not the figures and I would not like to speak on it.

MR. COMMISSIONER BRITNELL: Just one or two points of arithmetic to clarify my own thinking, or what may be my own thinking when we come to examine the matter further. In the table at page 2, the peak year, or the year of peak production, is 1956 -- as far as these figures go, anyway. Does that represent the all-time high coal production?

MR. THOMSON: Yes, sir.

MR. COMMISSIONER BRITNELL: So that 1957 would be the second-highest on record?

MR. THOMSON: Yes.

MR. COMMISSIONER BRITNELL: At the bottom of the page and the top of page 3, in the percentages that are given, I presume the percentages refer to tonnage rather than to total B.T.U.?

MR. THOMSON: That is correct.

MR. COMMISSIONER BRITNELL: So that by comparison with some of the Drumheller coal coming in on the other side with higher B.T.U. content, the percentage of B.T.U. would be somwhat higher?

MR. THOMSON: There are different kinds of coal coming in, and I made a small calculation taking arbitrarily 11,000 B.T.U. for the coal coming into Saskatchewan, other than Saskatchewan lignite, and approximately 7,500 for Saskatchewan lignite, which I think would be a fair average of

the two. I have those calculations here if you would like them. That would be, I think, a reasonably fair BTU to apply.

MR. COMMISSIONER BRITNELL: Thank you. One final point: your brief at the middle of page 3, the second full paragraph, states, "At the average price received at the mine, the cost per million BTU is less than 15 cents." Then, a sentence or two later: "The cost f.o.b. cars at destination is generally less than 35 cents per million BTU." I have a little difficulty roaming around among these millions of BTU, and I wondered whether you could express these values in dollars per ton.

MR. THOMSON: The average selling price at the mine is approximately $2.10 per ton, and, relating to the 35 cents per million BTU, the greater portion of our coal is sold at a freight rate of less than $3.25. So that the total laid-down cost representing that 35 cents would be approximately $5.25 a ton. At Winnipeg, for instance, the laid-down cost to, for example, the City Hydro on cars of the size they use is $5.08, and that was the basis of those figures per million BTU.

MR. COMMISSIONER BRITNELL: Would it be possible for you to give us any indication of what the mining costs are per ton -- not for particular companies; I would not ask that.

MR. THOMSON: I do not have the average, but I will send you one. There is one published by the Dominion Coal Board which is an average of the whole Saskatchewan operation, and we could supply you with that.

MR. COMMISSIONER BRITNELL: You will file that?

MR. THOMSON: Yes.

THE CHAIRMAN: Mr. Thomson, you seem to be against an interim report unless all forms of energy are taken into account: you mean uranium also and hydro?

MR. THOMSON: Yes, sir.

THE CHAIRMAN: For an interim report on gas, coal and oil you would have to wait for uranium and hydro?

MR. THOMSON: Our feeling is that we are afraid, perhaps, of the obvious dangers of an interim report which does not cover all the various angles.

THE CHAIRMAN: We thank you very much, Mr. Thomson, for coming to Manitoba.

ANGUS, STONEHOUSE & CO. LTD.
TORONTO, ONTARIO

Submission of

HUDSON BAY MINING AND SMELTING COMPANY LIMITED

Appearances:

Mr. M. A. Roche - Assistant to the Vice-President

Mr. J. Hoskins, Q.C.- Counsel

MR. PATTERSON: Mr. Chairman, we will proceed with the submission of Hudson Bay Mining and Smelting Company Limited. Mr. Hoskins is here as counsel and will introduce the gentleman making the submission. Might it be marked as Exhibit W-22-2?

---EXHIBIT NO. W-22-2: Submission of Hudson Bay Mining and Smelting Company.

MR. HOSKINS: Mr. Chairman and members of the Commission, Maurice Roche, who is Assistant to the Vice-President of the Company, will make the submission to the Commission.

THE CHAIRMAN: You may proceed, Mr. Roche.

MR. ROCHE: Mr. Chairman, this submission is made on behalf of the Hudson Bay Mining and Smelting Company Limited.

The principal purpose of this short brief

by a base metal producer in the northern part of Manitoba is to inform and convey to the Royal Commission on Energy, the detrimental effect any further curtailment or closing down of coal mines, particularly in the Crow's Nest area, would have on the Mining Company's copper smelter and zinc fuming plant at Flin Flon, Manitoba, where a total of some 400 tons of high grade or premium bituminous coal is consumed each day.

The Mining Company wishes to further point out that the high quality of the Crow's Nest coal, with its reasonably high reactivity for quick ignition, makes it most amenable to the operation of the copper smelter and zinc fuming plant.

The Mining Company has, over a period of years, spent large sums of money experimenting with other types and kinds of coal with the hope of finding a second source of satisfactory fuel within the boundaries of Canada.

Conversion of the copper smelter from premium coal to fuel oil would require a large initial expenditure in addition to a somewhat higher operating cost.

Conversion of the copper smelter from premium coal to gas would be uneconomical due to the overall limited requirements of gas and its remoteness from a pipe line or source of supply.

Neither gas nor oil can be substituted

for premium coal in the operation of the Company's zinc fuming plant, where presently some 50 per cent of zinc production is recovered from the smelter slag as a zinc oxide. The high carbon coal used in the fuming plant serves not only as a fuel but as a chemical reagent.

It is, therefore, most important when considering the adoption and approval of a pricing policy for gas and oil concerns by the Commission, that prices include not only the true cost of operation, but a fair share of the proper amortization of the pipe line installation cost and financial charges, which will reflect from the outset a realistic price structure over a reasonable period of time. A policy of this nature, we believe, will not jeopardize the important continued existence of their coal competitors.

Failure to give the coal companies proper consideration when dealing with the oil and gas industry in respect to the above paragraph, may conceivably lead to eventual closing of the Alberta and British Columbia coal mines, thus forcing the mining company to acquire its coal requirements in a foreign market.

The Mining Company uses considerable Bunker "C" fuel oil in other miscellaneous plant operations and it is not its intention to suggest that the oil and gas producers be restricted in any

way to deprive them of natural advantages.

It may be of interest to the Commission to note the following facts about the operation of the Hudson Bay Mining and Smelting Company Limited and the adjacent Town of Flin Flon.

The Hudson Bay Mining and Smelting Company Limited started operation in 1930 and production has continued without interruption since that time. The recovered metals are as follows:

	Year 1957	1930 - 1957
Copper	88,687,785 lbs.	1,896,242,500 lbs.
Zinc	117,599,050 lbs.	2,488,231,586 lbs.
Gold	97,486 ozs.	3,404,371 ozs.
Silver	1,528,295 ozs.	48,409,028 ozs.
Cadmium	226,348 lbs.	3,791,192 lbs.
Selenium	98,500 lbs.	2,079,800 lbs.

Bituminous coal consumed from 1930 to 1957 inclusive, totals 1,862,457 tons.

Expenditures for incoming and outgoing freight from 1930 to 1957 inclusive totals $59,935,000.

The Company employs 3,000 men and expends some $12,000,000 annually for wages and $8,000,000 for materials and plant supplies.

The Town of Flin Flon has a population of 15,000 persons.

We trust this brief submission clearly sets out our position and will be of some help

to the Commission in their hearings.

THE CHAIRMAN: Thank you, Mr. Roche.

MR. PATTERSON: Mr. Roche, I wonder if you could assist us with some figures: first of all, what is the purchase price paid at the Crow's Nest mines, or mine, per ton of coal?

MR. ROCHE: The exact figure I haven't got; it is somewhere around $6 or $7 a ton.

MR. PATTERSON: And transportation charges from the area to Flin Flon?

MR. ROCHE: They would be very similar -- the same amount.

MR. PATTERSON: A further $6 or $7?

MR. ROCHE: That is correct.

MR. PATTERSON: Is subvention paid on the shipment?

MR. ROCHE: No, no subvention is paid on our coal.

MR. PATTERSON: In your 400 tons a day consumption do you have long-term contractual arrangements for those purchases with any particular mine?

MR. ROCHE: It is generally on an annual basis.

MR. PATTERSON: With one or more mines in the area?

MR. ROCHE: Dealing with one mine -- one company has several mines; Crow's Nest.

MR. PATTERSON: Crow's Nest Coal Company?

MR. ROCHE: Yes.

MR. PATTERSON: Thank you, sir.

MR. COMMISSIONER HOWLAND: Mr. Roche, you were dealing with securing the coals from the Crow's Nest Pass Coal Company: are there other operators in the area who have the quality of coal you are looking for?

MR. ROCHE: At present we haven't been able to find any coal with the same quality that was suitable for our operation. We have had to rely pretty much on Crow's Nest coal. We have experimented with coal from various other mines and they didn't come up to standard.

MR. COMMISSIONER BRITNELL: That is, the coal from Brazeau or the foothills west and south of Edson does not come up to your requirements?

MR. ROCHE: That is right. The BTU content has to be extremely good, and the moisture content has to be high in order to make our plant operation as efficient as possible.

MR. COMMISSIONER HOWLAND: But even within the Crow's Nest Pass area there are several?

MR. ROCHE: Yes, there are two or three mines we draw our fuel from.

MR. COMMISSIONER HOWLAND: And, again, let us distinguish between mines and companies:

these are all mines of the Crow's Nest Pass Coal Company?

MR. ROCHE: That is correct; they are all of the same company.

MR. COMMISSIONER HOWLAND: Did I understand the answer correctly in the first place, namely, that within the Crow's Nest pass there are quite a number of companies operating at different locations along the pass?

MR. ROCHE: That is correct.

MR. COMMISSIONER HOWLAND: But I understood you to say that so far it is only the mines of the Crow's Nest Pass Coal Company that have produced coal that is suitable for your use?

MR. ROCHE: That is right. It is only coal from those mines of the Crow's Nest Company that have proven satisfactory to our operation.

MR. COMMISSIONER HOWLAND: Yes, I thought I understood you to say that.

THE CHAIRMAN: Thank you very much, Mr. Roche, for submitting this brief.

ANGUS, STONEHOUSE & CO. LTD.
TORONTO, ONTARIO

Submission of

THE GREAT PLAINS GAS COMPANY LIMITED

Appearances:

Mr. Charles P. Bennett - President

Mr. Moe Dimentberg - Secretary and Treasurer

MR. PATTERSON: Mr. Chairman, the submission of The Great Plains Gas Company Limited can be marked Exhibit W-22-3.

---EXHIBIT NO. W-22-3: Brief of The Great Plains Gas Company Ltd.

MR. PATTERSON: Mr. Charles Bennett is here and he will introduce the other gentleman who is with him, and perhaps describe his own position in regard to Great Plains, and qualifications, and those of the other gentleman.

MR. BENNETT: Mr. Chairman, I am the president of the company, and Mr. Dimentberg is the secretary and treasurer. I thought, since he did the bulk of the work in the preparation of this brief, that he should answer for the brief.

I would like to give you his qualifications: he graduated in 1950 from the University of Manitoba in mechanical engineering where he took the gold medal. Since then he has had a variety

of industrial experience, but, related to the gas business he has done post-graduate work at the University of Toronto in business administration. He has attended a course at the Institute of Gas Technology in gas distribution, and is an ex-employee of the Winnipeg and Central Gas Company where he was intimately concerned with preparations for the arrival of natural gas.

THE CHAIRMAN: You may proceed, Mr. Dimentberg.

MR. DIMENTBERG: This report deals with two matters of concern to the management of our company and of significance to the people of Canada as a whole.

The first consists of (a) the wholesale price of gas in the Manitoba rate zone, and (b) certain policies of Trans-Canada Pipe Lines Limited which affect the development, or the potential market and the rights of distributing companies to compete for the market within the jurisdictional control of the proper authorities.

The second is concerned with policies that we feel should be adopted by federal regulatory bodies with respect to the licensing and construction of any pipe line which may be proposed to carry liquefied petroleum products westwards from the gas fields of Alberta.

CONCLUSIONS

I. Trans-Canada Pipelines: The following points are discussed in detail in the body of this report.

(a) The throughput charges to the Manitoba Rate Zone are in excess of those justified by an analysis of transmission costs. The excess charges range from 0.8¢/mcf for 90 per cent load factor service to 3.4¢/mcf for 50 per cent load factor. These values are based upon a gas price of 14.5¢/mcf at the Sask-Alta Gate.

(b) Under the agreement between Trans-Canada and Midwestern, gas will be sold at a discount at the U.S. border.

(c) Export of gas at Emerson is not essential to make the Trans-Canada project an economical one. This is clearly evidenced by the fact that the additional capacity to be installed for transporting 200 mmcf/day for export, places the operation of the pipe line beyond its optimum economic point.

(d) Sufficient quantities of gas have as yet not been contracted for the Winnipeg market. It is estimated that over 50 mmcf/day for pipeline capacity must be reserved if the future needs of the Winnipeg area are to be satisfied. It appears that pipeline capacity to supply this market may be obtained only by reducing export quantities

at Emerson.

II. Liquefied Petroleum Gas Products: On the basis of studies made by our company in 1956 it is estimated that the potential market for propane in the provinces of Manitoba and Saskatchewan exceed 56 million Imperial gallons per year. The large quantities of LPG which will be produced as by-products of natural gas well operation together with the large potential market, makes the construction of products line an economic possibility in the near future.

RECOMMENDATIONS

I. Trans-Canada Pipelines: It is respectfully submitted that:

(1) Permission for the export of gas at Emerson should be withheld until the utilities serving Canadian markets and in particular the Winnipeg area have been given an opportunity to contract for additional quantities of gas.

(2) The Board of Transport Commissioners or similar body be given the authority to regulate throughput charges of Trans-Canada Pipelines and to make any adjustment required to establish an equitable rate structure.

(3) The Government of Canada take immediate and necessary action to uphold the rights of any company with proper franchises, to purchase gas from Trans-Canada and to prevent any delays which

may tend arise by virtue of their "Exclusive" sales contracts.

II. Liquefied Petroleum Gas Product Line:

It is respectfully suggested that the best interests of the potential consumer of LPG products will be served by:

(a) Calling of competitive bids for the construction and operation of any future product line before any franchise awards are made.

(b) Declaring the pipeline to be a public carrier and requiring it to transport LPG products for any distributor or consumer.

(c) To prevent the establishment of a monopoly in the transport and distribution of LPG products, the award of a pipeline franchise should not be made to any company enjoying a monopoly for the distribution of LPG products in any area.

(d) Throughput charges should be under the control of the Board of Transport Commissioners.

(e) Any company tendering for a pipeline franchise should be required to post a bond covering the faithful performance of their undertaking.

QUESTIONS RELATING TO PART I - Trans-Canada Pipe Lines Limited:

(a) Potential market for natural gas in Greater Winnipeg and available pipeline capacity.

It is our belief that the building of the Trans-Canada Pipeline is an important milestone

in the development of the economy of Manitoba. We foresee that in areas where natural gas is made available, this fuel will in a matter of a few years become the most important source of thermal energy. Our studies indicate that the market for natural gas in Greater Winnipeg is far in excess of that for which gas supplies have at present been contracted. The capacity of the Trans-Canada Pipeline is now 300 mmcf/day and will be increased to 570 mmcf with the construction of two more compressor stations on the western leg. As indicated in table one most of this capacity has already been sold while negotiations are in various stages of completion with companies in other centres of Canada for the remaining capacity. At present only 46 mmcf of pipeline capacity has been reserved for the Winnipeg market. Our estimates indicate that in order to satisfy the existing market, pipeline capacity equal to at least 96 mmcf/day must be reserved.

It is therefore clear that with pipeline capacity at a premium care must be taken to make certain that the Canadian market is assured of sufficient gas supply before export is permitted at the American border.

The announced policy of the Trans-Canada Pipeline Company is to increase the deliverability of the western leg by the addition of four more compressor stations (making a total of nine stations

from the Saskatchewan gate to Winnipeg). The additional capacity is planned in order to transport 200 mmcf/day to Emerson for sale to Midwestern Gas Transmission Company of the United States. As pointed out above, it may be necessary to allot some of this capacity for the Winnipeg market. It is therefore respectfully recommended that approval of gas export at Emerson be withheld until the utilities serving, or interested in serving, the Winnipeg market have been given an opportunity for securing additional quantities of gas.

(b) Delivered Price of Gas in Manitoba,

The construction of a large diameter pipeline from the gas fields of Alberta has made it possible to transport gas to Manitoba at prices considerably lower than would be possible if a small diameter pipeline were installed to serve the prairie market alone. This fact, however, should not be used as an argument to approve gas prices greater than those required to bring the gas here. That is, the Manitoba market must share in the savings arising from the large diameter pipe line and should not be expected to subsidize areas further along the line.

It is our belief that the most equitable determination of rates for an area is achieved by apportioning the costs involved in transporting gas to the area on the ratio of pipeline capacity

reserved for that area to total pipeline deliverability to that point. A set of calculations must be made for various load factors so that a rate schedule varying with load factor is determined for each area.

Fig. 1 contains a schedule of throughput charges worked out for the Manitoba rate zone on the above basis. In determining the charts, published data of Trans-Canada Pipelines have been used for the most part. These have been supplemented wherever necessary by studies made by ourselves and others on the Economics of Natural Gas Transmission Lines. The throughput charges include depreciation at $3\frac{1}{2}$ per cent. General taxes at .5 per cent and interest plus profit at $7\frac{1}{2}$ per cent. Cost of gas to Trans-Canada at their Saskatchewan gate has been taken at $14\frac{1}{2}$¢/mmcf which corresponds to the price in effect during 1961.

In examining Figure 1, several conclusions may be drawn. Firstly it is seen that the operation of the pipeline at 780 mmcf/day results in higher throughput charges than those at 570 mmcf/day. In other words the pipeline would be operated above its optimum economic point. Since the additional capacity is planned for the transport of gas to the American market, it is our belief that that market should pay for the additional cost thus incurred. In particular it is our

contention that the rate schedule for the Manitoba zone should correspond to that indicated by curve (1). Curve (3) indicates the throughput charges to Emerson based on the principle outlined in the previous section. If, however, all incremental costs involved in the export of gas were allocated to this operation the throughput charges for export gas would be equal to that indicated by curve (6).

For purposes of comparison we have included the existing general service rate schedule of Trans-Canada Pipelines for Manitoba curve (4) and the rates contained in the agreement between Trans-Canada and Mid-Western curve (5). It is seen that while export gas is being sold at a discount the wholesale price in Manitoba is above that justified by throughput costs. Our study indicates that the excess charges range from 0.8¢/mcf for 90 per cent load factor to 3.4¢/mcf for 50 per cent load factor. Since the market for gas in Manitoba is predominantly space-heating, the charges at low load factor are of prime significance. It is concluded that the throughput charges at 50 per cent load factor are excessive by 20 per cent. In terms of total cost to the area once the market for gas is developed, this amounts to excessive charges of over $500,000 per year.

(c) Gas Purchase Contracts

As is well known the Trans-Canada project was made possible by the assistance given by the people of Canada through their elected Government. This consisted of two steps. The first was the agreement by the Federal Government to build the Northern Ontario section of the line, which consists of the most difficult construction of the venture, and to lease this section at low rental to Trans-Canada. The second was a loan of $80 million by the Federal Government to construct the western section of the line. Financing of the pipe line was completed after Government assistance was obtained. Financing was also dependent upon the knowledge that markets would be available to make the venture pay. Several agreements had been negotiated with distributing companies but there is no substance to the claim that these had to be exclusive. This point is clearly evidenced by the recent testimony of Trans-Canada Pipe Lines before the Natural Gas Distribution Enquiry Commission of Greater Winnipeg wherein they stated that no effort was made to examine the agreements between distribution companies and their respective municipalities. Surely if the pipeline financing were dependent upon the establishment of exclusive distributorships for gas, the franchises of the various distribution companies would have

been closely examined both by the pipeline company and by their underwriters.

It is our contention that it is in the best interests of Trans-Canada to deal with all companies which are properly franchised, since the competition thus existing would help to develop the market and increase purchases from the pipe line.

We believe the "exclusive" sales agreements to be illegal and against the public interest. While we have correspondence from Trans-Canada Pipe Lines indicating they would sell us gas for distribution in any area where we are legally franchised, they have reversed their stand on this matter.

It is for this reason that we appeal to your Commission to recommend to the Federal Government that immediate and necessary action be taken to ensure that gas be made available to any company in Canada which is duly franchised and that no delaying action be tolerated.

It is further respectfully recommended that the Board of Transport Commissioners be given the authority to control throughput charges of the pipe line and that the principle for rate making outlined in Section (b) be followed.

PART II - LIQUEFIED PETROLEUM GAS PRODUCTS:

According to a study made by our firm in September 1956, the potential market for propane gas in the Provinces of Manitoba and Saskatchewan is estimated to be 20,000,000 and 36,000,000 Imperial gallons per year respectively. Only domestic, commercial and agricultural users are considered in the above figures. Additional quantities of this product will undoubtedly be used by natural gas utilities for peak shaving purposes while propane distribution utilities may be organized in communities remote from the Trans-Canada Pipe Line. While it is difficult at present to estimate these markets, it is believed that a substantial additional demand for propane will be forthcoming from these quarters. The possibility of establishing chemical industries based upon propane, butane and other LPG products should not be overlooked.

The construction of the Trans-Canada pipe line will result in greater production of LPG products at the stripping plants in Alberta. The combination of increased production and the availability of a large untapped market in the Provinces of Manitoba and Saskatchewan will undoubtedly make the construction of a products line an economic possibility in the near future.

To ensure that the transportation and distributing of LPG products results in maximum

benefits to the ultimate consumer and the country as a whole, care must be taken at the outset to prevent the formation of a monopoly. To this end we have made several recommendations which are outlined on page 3.

TABLE ONE

ESTIMATED 'SOLD' CAPACITY OF TRANS-CANADA PIPE LINES AND DELIVERABILITY

	Daily Deliveries in MCF	
	From Nov.1,1958 to Oct. 31,1959	From Nov.1,1962 to Oct. 31,1963
Quebec Natural Gas Corp.	30,000	102,000
Consumers Gas Co.	82,500	165,000
Northern Ontario Natural Gas		
- Northern Zone	28,000	69,000
- Western Zone	25,000	33,000
Winnipeg & Central Gas	30,300	46,400
Union Gas Co. of Canada	----	76,700
TOTAL CONTRACTED DEMAND	195,800	492,300
Additional Quantities based on Negotiations with Distributors in Canada	50,000	100,000
TOTAL CANADIAN MARKET	245,800	592,300
Midwestern Gas Transmission Agreement		200,000
TOTAL CANADIAN & AMERICAN MARKET		792,000

DELIVERABILITY OF PIPELINE TO WINNIPEG

3 Compressor Stations -	300,000 Mcf/day
5 Compressor Stations -	570,000 Mcf/day
9 Compressor Stations -	780,000 Mcf/day

TABLE TWO

ESTIMATED THROUGHPUT COSTS AND CHARGES
OF TRANS-CANADA PIPE LINES

BASIS - Cost of Gas at Sask.-Alta. border 14½¢/MCF

Cents Per MCF

Load Factor	Throughput costs to Winnipeg capacity of line - 570 mmcf per day	Throughput costs to Winnipeg Capacity 780 mmcf per day	Throughput costs to Emerson 200 mmcf per day Export	Trans-Can. General Service Rate Manitoba	Trans-Can. Midwestern Sales Agreement
90%	9.6	10.3	11.9	10.4	11.3
80%	10.8	11.5	13.3	13.3	12.2
75%	11.5	12.3	14.1	13.8	12.7
70%	12.3	13.1	15.1	16.9	13.4
60%	14.3	15.2	17.5	18.4	14.9
50%	17.1	18.1	20.8	20.5	17.1

---(Fig. One - Trans'Canada Pipe Lines Rates and Estimated Throughput Costs - see page following page 10 of Brief.)

TRANS-CANADA PIPE LINES LIMITED

160 Bloor Street East,
Toronto 5, Ontario,
July 8th, 1957.

Mr. C. P. Bennet,
President,
Great Plains Gas Company Limited,
209 Kresge Building,
Winnipeg 1, Manitoba.

Dear Mr. Bennet:

With this letter we are sending you a copy of our MD-2 rate schedule which will outline the detailed sections of our schedules, and also we are sending a summary of the various rates which are available in Manitoba.

Although we do not have a standard contract, we do have standard terms and conditions of which we are sending you a copy with this letter.

After you have obtained your necessary permits, franchises and certificates to serve any city, town or municipality, we shall be glad to discuss the details of a contract.

Very truly yours,

B. E. Lowe,
Sales Manager

BEL/L

Encls.

ESTIMATE OF THROUGHPUT COSTS OF TRANS-CANADA PIPE LINES FROM SASK.-ALTA. BORDER TO WINNIPEG AND EMERSON

1. DATA - Size of Transmission Line to Winnipeg - 34 in.
   Size of Emerson Lateral - 24 in.
   Length of line to Winnipeg - 586 miles
   Length of Emerson Lateral - 48 miles
   Number of compressor stations for 570 MMCF/day capacity - 5
   Number of compressor stations for 780 MMCF/day capacity - 9

2. ESTIMATE OF CAPITAL COSTS

	Sask. Gate to Winnipeg		Emerson Lateral
	570 MMCF/day	780 MMCF/day	
Cost of Transmission Line	$80,000,000[a]	$80,000,000	$4,000,000
Cost of Compressor Stations	$22,000,000[b]	$52,000,000[c]	$1,540,000[d]
Total Cost of Line	$102,000,000	$132,000,000	$5,540,000
Working Capital	$ 2,800,000[e]	$ 2,800,000	-----
Total Capital Investment in Pipeline	$104,800,000	$134,800,000	$5,540,000
Additional Capital Investment to increase capacity from 570 MMCF/day to 780 MMCF/day		$30,000,000[c]	

NOTES:

a. Based on government loan

b. Estimated at $4,400,000 each station.

c. $30,000,000 to be spent to increased capacity from 570 MMCF/day to 780 MMCF/day (see page 19 of prospectus).

d. Pro-rated cost of compressor station at Winnipeg.

e. 50% of Company's initial working capital (see page 4 of prospectus).

3. ESTIMATE OF OPERATING COSTS PER YEAR

	Sask.gate to Winnipeg 570 MMCF/day	780 MMCF/day	Increment Costs involved in increasing cap. to 780 MMCF/day	Emerson Lateral
Pipeline Operating Expenses	\$ 393,000[f]	\$ 393,000		\$ 24,000
Other and General Expenses	\$ 177,000	\$ 177,000		\$ 10,800
Compressor Station Operating Expense	\$2,230,000[g]	\$5,530,000[h]	\$3,300,000	\$157,500
Gas CompressionCosts	These are dependent on load factor (see Sec.4&5)			
General taxes at 0.5% of fixed assets	510,000	660,000	150,000	27,700
Depreciation at 3½% of fixed assets	3,570,000	4,620,000	1,050,000	193,900
Profit & Interest at 7½% of Invest.	7,870,000	10,120,000	2,250,000	415,500
Income Tax	2,660,000[j]	3,418,000	758,000	140,000
Total Operating Cost Less Gas Compression Charges	\$17,410,000	\$24,918,000	\$7,508,000	\$969,400

f. At \$500 per mile plus \$100,000 for dispatching.

g. At \$450,000 per station.

h. At \$615,000 per station.

j. See section 6.

ESTIMATE OF GAS COMPRESSION COSTS

	SASK.GATE TO WINNIPEG			EMERSON LATERAL
	570MMCF/day	780MMCF/Day	Increment costs involved in increasing capacity to 780 MMCF/day	
Fuel consumed in compression at each compressor station	2.5MMCF/day	3.42MMCF/day		0.91 MMCF/day
Total Fuel Consumed per year at 100% load factor	4.560MMCF	11.220MMCF	6,660MMCF	332 MMCF
Fuel Cost at 100% load factor	\$685,000[k]	\$1,680,000	\$995,000	\$49,800

k. at 15¢/MCF.

ESTIMATE OF THROUGHPUT COSTS

(A) TRANSMISSION FROM SASKATCHEWAN GATE TO WINNIPEG - CAPACITY OF LINE - 570 MMCF/DAY

LOAD FACTOR	90%	80%	75%	70%	60%	50%
Total Operating Costs Less Gas compression Costs	$17,410,000	$17,410,000	$17,410,000	$17,410,000	$17,410,000	$17,410,000
Gas Compression Costs	615,000	547,000	512,000	478,000	410,000	341,000
Total Throughput Costs per Year	$18,025,000	$17,957,000	$17,922,000	$17,888,000	$17,820,000	$17,751,000
Total Throughput MMCF Per Year	187,000	166,500	156,000	145,500	124,800	104,000
Throughput costs per MCF	9.64¢	10.80¢	11.50¢	12.30¢	14.30¢	17.10¢

(B) TRANSMISSION FROM SASKATCHEWAN GATE TO WINNIPEG - CAPACITY OF LINE - 780 MMCF/DAY

LOAD FACTOR	90%	80%	75%	70%	60%	50%
Total Operating Costs Less Gas Compression Costs	$24,918,000	$24,918,000	$24,918,000	$24,918,000	$24,918,000	$24,918,000
Gas Compression Costs	1,515,000	1,345,000	1,260,000	1,175,000	1,010,000	842,000
Total Throughput Costs/Year	$26,433,000	$26,263,000	$26,178,000	$26,093,000	$25,928,000	$25,760,000
Total Throughput MMCF Per Year	256,000	227,000	213,000	199,000	170,500	142,000
Throughput Cost per MCF	10.32¢	11.55¢	12.30¢	13.10¢	15.2¢	18.1¢

(C) TRANSMISSION COSTS FROM WINNIPEG TO EMERSON
- CAPACITY OF EMERSON LATERAL - 200 MMCF/DAY

LOAD FACTOR	90%	80%	75%	70%	60%	50%
Total Operating Costs Less Gas Compression Costs	$ 969,400	$ 969,400	$ 969,400	969,400	969,400	969,400
Gas Compression Costs	44,700	39,800	37,200	34,800	29,800	24,900
Total Throughput Costs Per Year	$1,014,100	$1,009,200	$1,006,600	$1,004,200	999,200	$ 994,300
Total Throughput MMCF Per Year	65,700	58,400	54,700	51,200	43,800	36,500
Throughput Cost Per MCF	1.54¢	1.73¢	1.84¢	1.96¢	2.28¢	2.73¢

(D) Increment Costs Involved in Transmitting Gas From Saskatchewan Gate to Winnipeg, based on Increment Capacity of 570 to 780 MMCF/day.

LOAD FACTOR	90%	80%	75%	70%	60%	50%
Total Operating Costs Less Gas Compression Costs	$7,508,000	$7,508,000	$7,508,000	$7,508,000	$7,508,000	$7,508,000
Gas Compression Costs	895,000	796,000	747,000	697,000	597,000	497,000
Total Throughput Costs Per Year	$8,403,000	$8,304,000	$8,255,000	$8,205,000	$8,105,000	$8,005,000
Additional Throughput at Increased Capacity MMCF/Year	69,000	61,300	57,500	53,700	46,000	38,300
Throughput Cost Per MCF	12.2¢	13.5¢	14.35¢	15.3¢	17.6¢	20.9¢

(E) TRANSMISSION COSTS FROM SASKATCHEWAN TO EMERSON

BASED ON AVERAGE COSTS

Pipeline capacity 780 MMCF/day to Winnipeg
200 MMCF/day to Emerson

LOAD FACTOR	90%	80%	75%	70%	60%	50%
Throughput Cost to Winnipeg ¢/MCF	10.32	11.55	12.30	13.10	15.20	18.10
Throughput Cost Winnipeg to Emerson ¢/MCF	1.54	1.73	1.84	1.96	2.28	2.73
Total Throughput Cost-Sask.gate to Emerson ¢/MCF	11.86	13.28	14.14	15.06	17.48	20.83

(F) TRANSMISSION COSTS FROM SASK. GATE TO EMERSON

BASED ON INCREMENT COSTS

Pipeline Capacity 780 MMCF/day to Winnipeg
200 MMCF/day to Emerson

LOAD FACTOR	90%	80%	75%	70%	60%	50%
Throughput Cost to Winnipeg ¢/MCF	12.2	13.5	14.35	15.3	17.6	20.9
Throughput Cost Winnipeg to Emerson ¢/MCF	1.54	1.73	1.84	1.96	2.28	2.73
Total Throughput Cost -Sask.gate to Emerson 6/MCF	13.74	15.23	16.19	17.26	19.88	23.63

ESTIMATE OF INCOME TAX PAYMENTS

(Based upon capacity of line to Winnipeg -
570 MMCF/Day

From page 7 of prospectus -- total interest in Canadian funds -- $10,644,196.

Total Capital Requirements for line $227,000,000 (Canadian Funds).

By ratio interest payments on western section of line

$$= \frac{\$104,800,000}{\$227,000,000} \times \$\ 10,644,196$$

$$= \$\ 4,870,000$$

Total Profit & Interest on Western Section of Line

$$= \$\ 7,870,000$$

Net Profit on Investment in Western Leg = $7,870,000 - $4,870,000

$$= \$3,000,000$$

Income Tax at 47% $= \frac{47}{53} \times \$3,000,000 = \$2,660,000$

Rate of Income Tax to Investment $= \frac{\$\ 2,660,000}{\$104,800,000} \times 100 = 2.54\%$

MR. DIMENTBERG: Now, we have indicated an additional exhibit which is from Trans-Canada Pipe Lines whereby they have stated they will sell the gas in the area in which we are interested at the time. Further to that, at this stage they have stated that the only way they can sell us gas is if we obtain confirmation of our franchise. We feel that that procedure would amount to a significant delay to our operation and we feel that we are asking this Commission for some help in avoiding that delay and obtaining more positive action to obtain gas for which we are franchised.

THE CHAIRMAN: You have your franchise now?

MR. DIMENTBFRG: We have agreements with municipalities -- Assiniboia and Charleswood. These agreements have received second reading. They have not passed the Public Utilities Board and that is due to the fact that all the franchises in the Winnipeg area depend on Trans-Canada and it has made it very difficult for us to obtain financing and we feel the situation will probably be clarified if you recommend that Trans-Canada Pipe Lines be ordered to sell gas to any company.

THE CHAIRMAN: I notice you are against an export permit to Emerson. Do you feel the same way with Westcoast at the Vancouver border?

MR. DIMENTBERG: No, we feel that export

may be beneficial to the Canadian economy. What we feel is that exports should not be allowed until our market is served. We feel the Winnipeg area is not supplied with sufficient quantities of gas for future requirements so the export of gas at Emerson should be withheld until sufficient quantities are contracted by distributors in the Winnipeg area. We are not opposed to the export of gas at Emerson at all.

MR. PATTERSON: Can we deal just for a moment with the present position of Great Plains Gas Company? From your remarks am I right in taking it that at the moment you expect to get certain franchises but they do not, in fact, exist, and by reason of the situation in Manitoba that you describe you could not at the moment sign a contract with Trans-Canada Pipe Lines with any assurance of being able to perform them?

MR. DIMENTBERG: That is true. We could not at this time sign a contract with Trans-Canada. We have not obtained the approval of municipal and other boards.

MR. PATTERSON: Does that also mean at the moment Great Plains Gas Company Limited simply has its organization of shareholders, you have not yet gone for public subscription?

MR. DIMENTBERG: That is true.

MR. PATTERSON: Are there four or five?

MR. DIMENTBERG: There are five directors and officers of the company.

MR. PATTERSON: Now, what do you consider, dealing with this LPG matter, what do you consider would be the kind of market or size of market that would be necessary to justify the LPG products?

MR. DIMENTBERG: We have made some estimates previously. I think the size of the market would determine the diameter of the pipe line. Actually the estimates we have had were based on something like 170 billion Imperial gallons per year throughput and that amounted to an eight-inch diameter line. However, that will probably mean export either to Port Arthur-Fort William or else to the American border. If the market exists only in Manitoba and Saskatchewan it will probably be a smaller diameter pipe line required.

MR. PATTERSON: You mention the size of the potential market on page 2. Is that the presently existing market or is that one that comes into existence at some time?

MR. DIMENTBERG: It is not a market that is being sold on LPG quantities but it is a potential market based upon the comparisons; the potential consumers are Manitoba and Saskatchewan, to those in North and South Dakota and Montana, and we believe the experience shown by these areas is

applicable to Manitoba and Saskatchewan conditions.

MR. PATTERSON: What you are saying is this, if I understand you correctly, that if one had at the moment the LPGs to sell you think you could find a market to expand the 36 million per year?

MR. DIMENTBERG: Yes, the potential is there but it would have to be developed.

MR. PATTERSON: Now, carrying on with the LPG products line you recommend at page 3 that the best interests of the potential consumer of LPG products will be served by calling on competitive bids for construction. Now, whom would you anticipate you would call on for competitive bids?

MR. DIMENTBERG: Well, I believe the Board of Transport Commissioners would be the body that would award the franchise and it would be the Board of Transport Commissioners calling for tenders.

MR. PATTERSON: I am a bit puzzled by the use of the phrase "competitive bids". Do you mean that the Board of Transport Commissioners would intimate generally that if someone were to come forward with an application to build an LPG line the same would be considered; is that not about as far as they can go?

MR. DIMENTBERG: I think so. I think the situation would be that if one company proposed

that they wanted to build an LPG products line the Board of Transport Commissioners before awarding the franchise would make certain whether there was any other company that would also like to build on that franchise.

MR. PATTERSON: Really what you are saying by this phrasing is perhaps that it could be accomplished by general advertising and publication of hearings?

MR. DIMENTBERG: Well,that probably would be sufficient.

MR. COMMISSIONER HOWLAND: Is not the procedure now that you can keep your eye on the operation of the Board and make a tentative bid as you go along?

MR. DIMENTBERG: Actually we have not looked at the situation but if that is the situation, that is, as far as we feel, quite satisfactory.

MR. PATTERSON: Now, dealing with the market for gas in Winnipeg area, studies indicate that the market is far in excess of that for which gas supplies have at present been contracted. In making that statement, who has contracted for gas in Winnipeg? Are other companies such as yourself prepared to contract additional volumes so they would get up to this 96 MMCF/day figure?

MR. DIMENTBERG: Well, the only company

now that has the contract for gas in Winnipeg is the Winnipeg and Central Gas Company and that is the figure we have given as to the present contract. As far as the position of other companies being able to contract for gas, I think that position is still uncertain and can only be solved by the Greater Winnipeg Distribution Commission.

MR. PATTERSON: But have the other companies indicated that a size of market that is in relation to the amount ---

MR. DIMENTBERG: That is true and that is what we are basing our figures on, both ours and others competing for that.

MR. PATTERSON: Now, to the extent that I can briefly review this question of a dollar price of gas in Manitoba, you suggest that the Manitoba market must share in the savings arising from the large diameter pipe line and should not be expected to subsidize areas further along the line. Now, in making your calculations that give rise to the balance of what you have to say on the subject, did you take into consideration the problem of high peak load in Manitoba interfering with total throughput during that peak period and some proposed penalty factor for Manitoba if there is loss of throughput to the East?

MR. DIMENTBERG: That is actually

considered because as we indicated it is based on the valuable load factor. We are not asking that the Manitoba rate shown, which probably has a very low load factor, should pay a lower price for gas than someone further along the line, but if the load factor consideration is called then the price in Manitoba -- that is the basis on which our curves are worked out.

MR. PATTERSON: In other words you are saying if you use one-quarter of the diameter of the pipe line and somebody else uses one-quarter of the diameter then the charge should be related to the length of pipe?

MR. DIMENTBERG: To that point it is right.

MR. PATTERSON: And in your calculations throughout you use as your price that of the early contracts which were the 14½ cents at the Saskatchewan gate?

MR. DIMENTBERG: That is the price contained in the Trans-Canada prospectus, that is the 1961 price.

MR. PATTERSON: Thank you.

MR. COMMISSIONER HOWLAND: On this LPG, in the discussion here I notice that you say on page 8:

"To ensure that the transportation and
"distributing of LPG products results in

"maximum benefits to the ultimate con-
"sumer and the country as a whole, care
"must be taken at the outset to prevent
"the formation of a monopoly."

In some of the discussions before us there has been considerable satisfaction that without a great deal of regulation we have not had a lot of competing pipe lines crossing each other. What is in your mind in the word "monopoly"?

MR. DIMENTBERG: Monopoly by one pipe line. We feel the present situation would be justified only with the installation of one products line of Western Canada. The term monopoly we are using there is a monopoly that will consist of a products line in relation to the distribution of LPG products to the ultimate consumer. We feel that should be effected, if possible, that the control of the pipe line operation should be in the hands of say one company and the distribution of the LPGs should be in the hands of a completely separate company or companies. We would prefer more than one.

MR. COMMISSIONER HOWLAND: So you would make a distinction between the pipe lines?

MR. DIMENTBERG: That is right. The trunk pipe line would have a monopoly and we feel that would probably be the most economical method of dealing with the pipe line.

We cannot foresee at the moment two products lines being constructed, two separate competing companies, but we feel if we have one pipe line, if we had a regulating pipe line, the distribution of the LPG products should be handled by a completely separate company.

MR. COMMISSIONER HOWLAND: When you say "regulated", what do you mean?

MR. DIMENTBERG: We are referring to regulations under the Board of Transport Commissioners or others. We feel the pipe line should be made a public carrier and the regulations should be made by the Board of Transport Commissioners, I think in the same way as the Interprovincial Pipe Line. That is, any distributor or refiner can utilize the pipe line and the throughput charges could be under regulated control.

MR. COMMISSIONER HOWLAND: I am not too familiar with the regulations but there is a distinction between operating as a common carrier and being declared a common carrier, and if I understand it correctly if the Board of Transport Commissioners declare a pipe line a common carrier then it is subject to considerable regulation as to pretty well everything. I do not believe there is a pipe line so declared, but you had in mind that they would have a pipe line so constituted it would be declared a common carrier?

MR. DIMENTBERG: Yes, sir.

MR. COMMISSIONER HOWLAND: And regulated in that manner?

MR. DIMENTBERG: That is right.

MR. COMMISSIONER HOWLAND: I think that is all.

THE CHAIRMAN: Mr. Bennett and Mr. Dimentberg, we thank you very much for your study of Trans-Canada rates and the technical data contained in your brief. We have not had very much time to study the brief but we feel sure that when we have had an opportunity to examine it in detail if we desire to review it with you or get further information I know you will be pleased to supply it. Thank you very much.

This concludes our hearing in Winnipeg and before adjourning I want to thank the Province of Manitoba for making our stay in Winnipeg so pleasant: we have enjoyed your hospitality and the arrangements for these hearings.

I want to thank particularly the officials of the Government of Manitoba who cooperated with our staff in making arrangements for us and, of course, thank all the witnesses who appeared before us.

The hearing is now adjourned.

---Whereupon the hearing adjourned at 12.40 p.m. until Wednesday, July 2nd, in Toronto, Ontario.